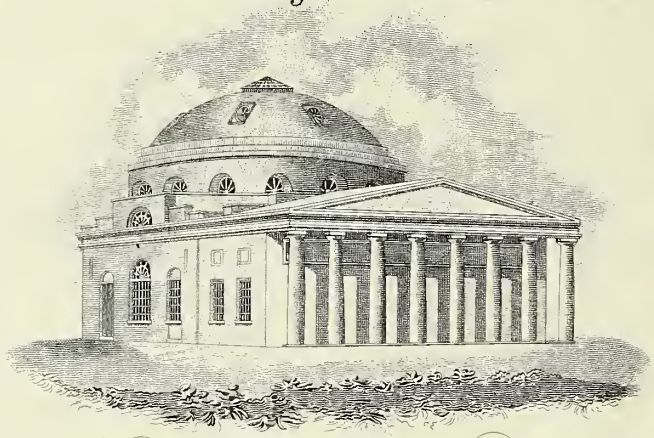
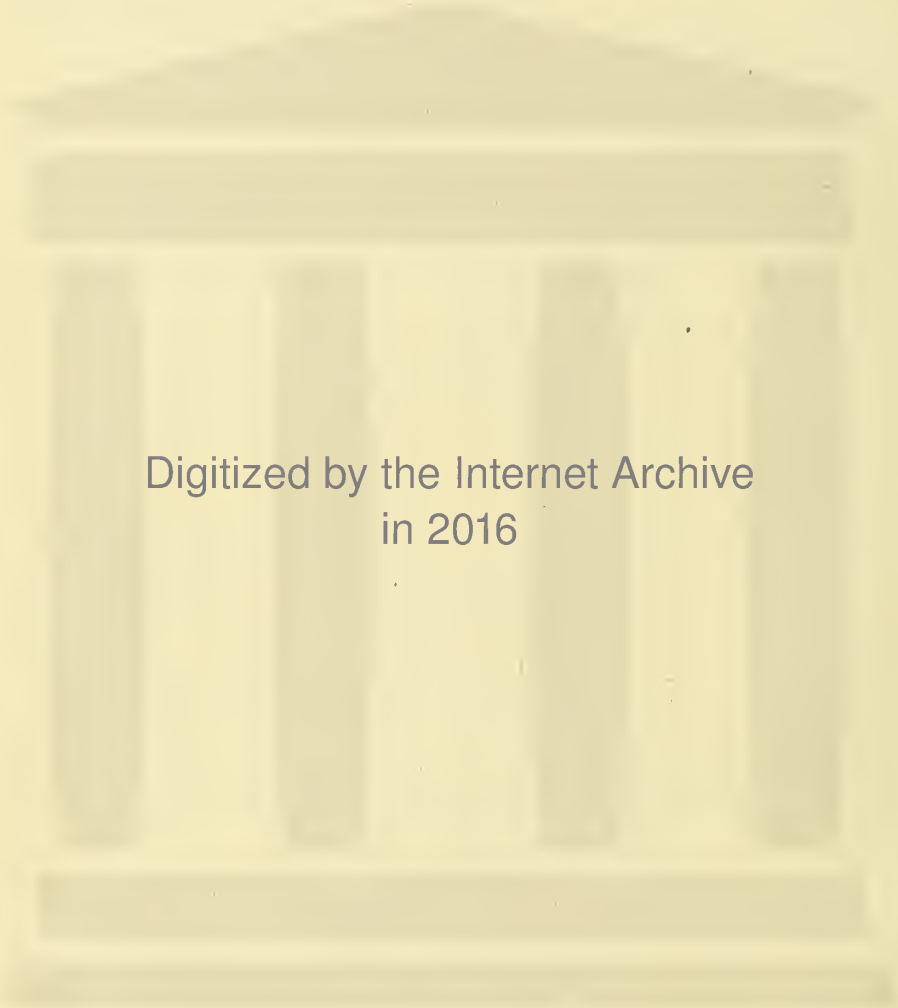
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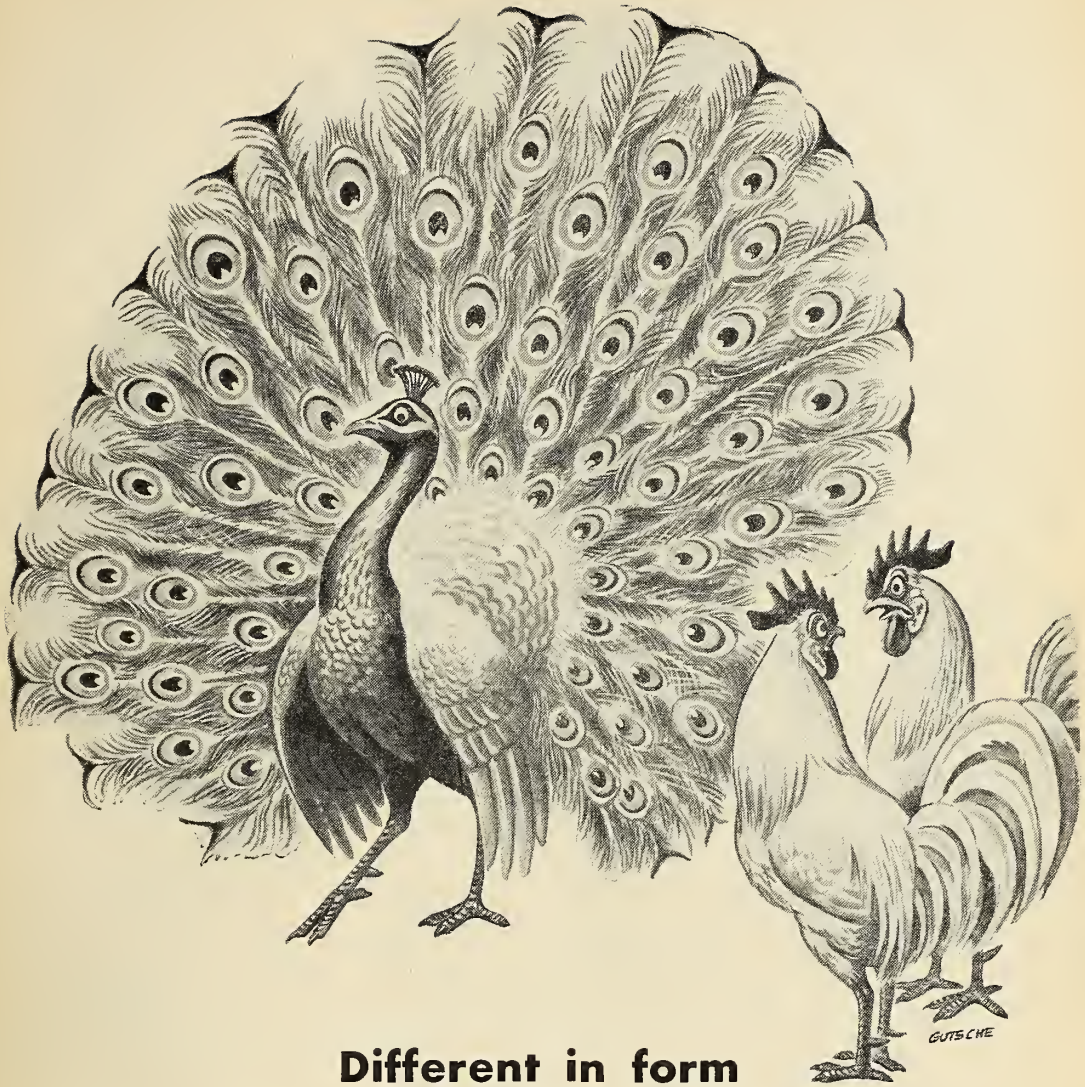
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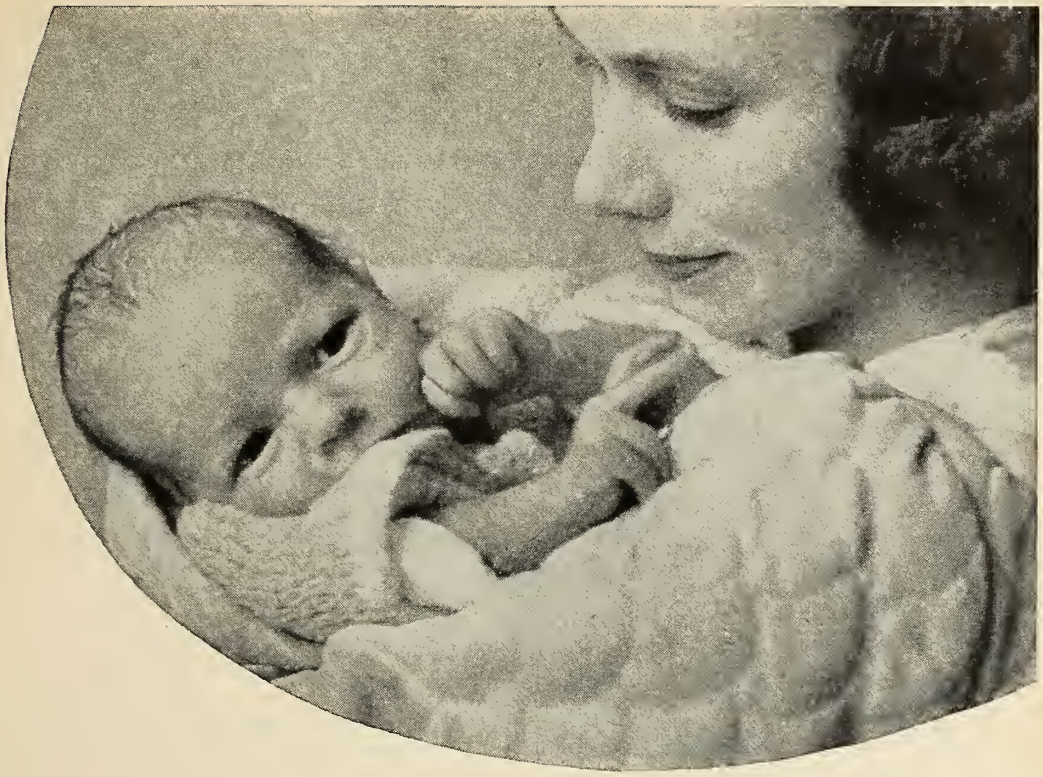
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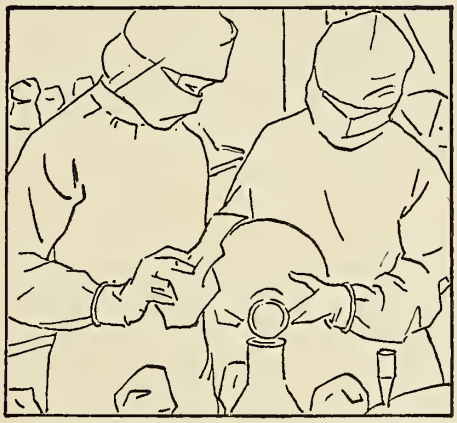
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BORDEN'S FARM PRODUCTS CO. OF MICHIGAN

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...*insures your confidence here*



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Producers of Penicillin Schenley
Executive Offices:
350 Fifth Avenue, New York City

At the Schenley Laboratories, a system of control of vast proportions insures maximum purity, potency, and pyrogen-freedom for the end product which bears the label Penicillin Schenley.

Since its production is safeguarded with such skill and precision at every step, members of the medical profession can feel the greatest confidence when they specify Penicillin Schenley.

Your Local Distributor for **PENICILLIN** SCHENLEY *is:*

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J. F. Hartz Co., Inc.
The G. A. Ingram Co., Inc.
A. Kuhlman & Co.
Randolph Surgical Supply Co.

JACKSON
Nobel-Blackmer, Inc.

You and Your Business

THE MICHIGAN DIVISION OF THE AMERICAN SOCIETY FOR CONTROL OF CANCER INCORPORATES

A sub-committee of the State Executive Committee of the American Cancer Society appointed to study articles of incorporation and by-laws, presented its findings at a meeting held in Lansing on November 20, 1945. These, after being amended, were accepted and the Society is now prepared to incorporate under the laws of the State of Michigan. It was the desire of the Executive Committee and of the Field Army to form the frame work for a democratic and representative body to administer the program of the American Cancer Society in a manner conducive to the better functioning of the Society.

The name adopted was the The American Cancer Society, Michigan Division, Incorporated. The objective, the provision of an educational, service and research program for the control of cancer in co-operation with all bodies working toward the same end in the State of Michigan.

The chart of organization provides for a Board of Directors not less than forty in number, comprising both medical and lay members. The President of the Board is to be a layman, and the Chairman, a physician (M.D.). Members shall be the President of the Michigan State Medical Society, the Chairman of the Cancer Committee of the Michigan State Medical Society, the President of the State Dental Society, Secretary and Treasurer, and the State Commander of the Field Army. There is also to be representation from veterans' organizations, and from the State Nurses' Association. The President of the State P.T.A. shall also be a member of the Board.

It is planned to have two executive committees, professional and lay. The Professional Executive Committee will consist of a Chairman (M.D.), the President of the Michigan State Medical Society, the Chairman of the Cancer Committee of the Michigan State Medical Society, the President of the Michigan State Dental Society, a member of the State Board of Health (M.D.) and ten physicians chosen by the Chairman. This committee will be the policy-making body for all projects having to do with medical matters.

The Lay Executive Committee will deal with fund raising and finances. It will consist of a Chairman (President of the Board), the Secretary of the Board, the Treasurer of the Board, and ten laymen appointed by the Chairman.

The county unit shall have as officers, the President (layman), Chairman (physician, M.D.), County Commander, Secretary and Treasurer. The Board shall have as members, the President of the County Medical Society, Chairman of the Cancer Committee of the County Medical Society, County Commander, County Treasurer, and two laymen designated by the County Commander. There will also be a County Financial Executive Committee of laymen and a Field Executive Committee of nine members on which there will be the President of the County Medical Society, the Chairman of the Cancer Committee of the County Medical Society, the President of the County Dental Society, the head of the Health Department, if a physician, M.D., and the Chairmen of three Field Army Committees.

The Michigan Division of the American Cancer Society, Inc., will co-ordinate its efforts in all cancer control activities to work closely and harmoniously with the Michigan State Medical Society Cancer Committee.

————MSMS Radio Hour, WJR, Detroit————

VETERANS ADMINISTRATION HOME-OFFICE MEDICAL CARE BY FAMILY PHYSICIANS

Home Town Medical Care for the Veteran in Michigan!

On December 27, 1945, a contract was signed with the Veterans Administration whereby home and office medical care of veterans may be given by the veteran's own doctor of medicine in his home community. This state-wide plan is the first of its kind in the country. It marks a great step forward in the Veterans Administration program of decentralization and of recognition of the physician-patient relationship. It is a project that should merit the enthusiastic support of every member of the Michigan State Medical Society.

Procedure.—The veteran applies for medical care by mail (or by phone in emergencies) to the

(Continued on Page 12)

CHLOR-U-CAIN

Burn Therapy

Greatly Shortens Healing Time

CHLOROPHYLL 1%

Accelerates burn healing, shortens time by as much as 50%*. Minimizes scar formation and speeds regeneration of tissue.

UREA 33.2%

Exerts a solvent action that aids in removing necrotic tissue debris. Tends to minimize foul odors and prevent infection.

BENZOCAINE 10%

Because only slowly absorbed, remains localized at burn site to give sustained anesthetic action.

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Vanishing, greaseless, washable, absorbent.

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Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO

*"Chlorophyll Urea Ointment in the Treatment of Burns and Chronic Ulcers." Industrial Medicine, 14:9, 730, Sept., 1945.

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Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

(Continued from Page 10)

Veterans Administration; he secures a case number permitting him to obtain a medical examination from his own doctor of medicine; after the examination (to determine disability and to what degree), he obtains authorization from the Veterans Administration for treatment.

Authorizations to doctors for both the physical examination and for the necessary treatment will come through Michigan Medical Service. The very foundation of satisfactory negotiations with the Veterans Administration was the existence of one central fiscal agency (Michigan Medical Service) for handling the thousands of medical bills.

Eligibility.—Male veterans with service-connected disabilities are eligible for service; female veterans with both service and non-service connected disabilities will be given care under this plan (since Veterans Administration Hospitals are for men only). The plan will cover all medical care (including surgery) of all veterans who are eligible for service. *Only two restrictions:* (a) specialist's care is available on special authorization and at the request of the family physician; (b) no transportation is paid to veterans who seek medical service elsewhere than in their home communities, except on special authorization by the Veterans Administration.

Effective Date—This plan of veterans' medical care to include all private doctors of medicine went into effect as of January 15, 1946. Every MSMS member has been invited to participate in this project.

This plan for veterans' care must not be confused with the prepayment plan of Michigan Medical Service. Although your acceptance commits you to the designated fee schedule in applicable cases of *veterans,* it does *not* commit you to render services under the prepayment plan of Michigan Medical Service. The Service is being used merely as a central fiscal agency to relieve doctors and the State Society from the necessary bookkeeping in connection with the care of veterans by thousands of family physicians.

If millions of men and women eventually are included under the Veterans Administration, any plan for their medical care must include the veteran's own family doctor, which he far prefers than a medical employe in a Veterans Hospital. If this experimental plan in Michigan works successfully, the use of the family doctor will spread to every other state in the Union. The medical service rendered, therefore, must be satisfactory, and all doctors of medicine must give their support to this program by participating. Thus, they will encourage the *private practice of medicine* and definitely discourage schemes of legislated health.

————MSMS Radio Hour, WJR, Detroit————

VETERANS ADMINISTRATION APPROVES UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES

A potent reason for approval by the Veterans Administration of Michigan's plan of home-office medical care of veterans by their family physicians was the existence of a state-wide Uniform Fee Schedule for Governmental Agencies. This Fee Schedule, adopted by the MSMS House of Delegates, on September 18, 1945, became effective January 1, 1946. The VA would not have dealt with eighty-three County Fee schedules.

A copy of the Uniform Fee Schedule for Governmental Agencies has been forwarded to each member of the Michigan State Medical Society, with several additional copies to the Secretary of every County and District Medical Society. The House of Delegates has instructed that copies of these schedules be presented by component county societies to the various governmental agencies with which they are in contact, with the notification that the Uniform Fee Schedule will henceforth be in force as the minimum fee schedule for the care of governmental wards and for indigents. The medical profession can no longer be penalized by being forced to perform services at a financial loss.

————MSMS Radio Hour, WJR, Detroit————

EXTEMPORANEOUS PUBLIC DEBATE

It is the sense of the Executive Committee of The Council that it is not compatible with the best interests and good public relations of the medical profession for its members to engage in Extemporaneous Public Debate on medical socio-economics. This does not refer to presentation of the views of the medical profession on socio-economic subjects in other than debate form.—Extract of minutes of meeting of Executive Committee of The Council, MSMS, (Nov. 28, 1945).

————MSMS Radio Hour, WJR, Detroit————

NATIONAL VOLUNTARY GROUP HEALTH PROGRAM

The House of Delegates of the American Medical Association at Chicago, on December 5, 1945,

(*Continued on Page* 20)

SULFATHIAZOLE GUM*

In Oral and Pharyngeal Infections . . .

One tablet of White's Sulfathiazole Gum chewed for one-half to one hour—

1. promptly provides a high salivary concentration of *locally active* (dissolved) sulfathiazole
2. that is *sustained throughout the chewing period* in immediate contact with infected oropharyngeal mucosal surfaces,
3. yet even with maximal dosage, resulting *blood levels* remain so low as to be virtually negligible.

Indications: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis; septic sore throat; infectious gingivitis and stomatitis; acute Vincent's disease.

Dosage: One tablet chewed for *one-half to one hour* at intervals of one to four hours depending upon the severity of the condition. If preferred, several tablets — rather than a single tablet — may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.



Pharmaceutical Manufacturers, NEWARK 7, N. J.

A. S. Brunk, M.D., Michigan, Honored

Elected to Presidency of Conference of State Association Presidents

A TOTAL of seventy-five was expected—208 attended!

The first Annual Conference of Presidents and other Officers of State Medical Associations, called by A. S. Brunk, M.D., Detroit, at the instruction of officials of twenty-five State medical societies who held public relations conferences in Detroit and Denver in the spring of 1945, proved to be a worthwhile and highly successful undertaking.



CHICAGO CONFERENCE OF PRESIDENTS, DECEMBER 2, 1945

Officers of Conference

(Seated) J. H. Howard, M.D., Connecticut; President-Elect P. K. Gilman, M.D., California; President A. S. Brunk, M.D., Michigan; Secretary-Treasurer H. T. Sethman, Colorado; G. A. Unfug, M.D., Colorado.

(Standing) L. H. Schriver, M.D., Ohio; Dick Graham, Oklahoma; R. D. Bernard, M.D., Iowa; W. E. Vest, M.D., West Virginia.

Other members of the Executive Committee not present when photograph was taken are: E. P. Coleman, M.D., Illinois; H. H. Bauckus, M.D., New York; N. K. Forster, M.D., Indiana.

Forty-two states were represented at the Conference including: Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

An excellent program included a challenge to the medical profession presented in person by Arthur J. Altmeyer, Washington, D. C., Chairman of the Social Security Board who asked the question "How Can We Assure Adequate Service for All The People?"

How the medical profession can answer today's challenge was outlined by three doctors of medicine and a layman interested in medical economics: Joseph H. Howard, M.D., of Bridgeport, President of the Connecticut State Medical Society, urged the "Expansion of Voluntary Group Health Care Programs on a National Basis"; Philip K. Gilman, M.D., San Anselmo, President of the California Medical Association, outlined a plan of "Health Legislation Beneficial to the People"; O. O. Miller, M. D., Louisville, Immediate Past-President of the Kentucky State Medical Associa-

(Continued on Page 20)

● *Therapeutically and chemically,* Ertron differs from any other drug used today in the treatment of chronic arthritis.

● *10 years* of intensive clinical research has established the efficacy of Ertron in the management of arthritis.

● *5 years* of laboratory research has produced definite evidence that Ertron is chemically different.

Simply stated, Ertron is electrically activated vaporized ergosterol prepared by the Whittier Process.

Ertron contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure chemical form further establishes the chemical as well as the therapeutic uniqueness of Ertron.

Each capsule of Ertron contains 5 mg. of activation-products having a potency of not less than 50,000 U.S.P. Units of vitamin D.

To Ertronize the arthritic patient, employ Ertron in adequate daily dosage over a sufficiently long period to produce beneficial results.

The usual procedure is to start with 2 or 3 capsules daily, increasing the dosage by 1 capsule a day every three days until 6 capsules a day are given. Maintain medication until maximum improvement occurs. A glass of milk, three times daily following medication, is advised.

Supplied in bottles of 50, 100 and 500 capsules.
Parenteral for supplementary intramuscular injection.

Ertron is the registered trade-mark of Nutrition Research Laboratories

NUTRITION RESEARCH LABORATORIES • CHICAGO

NATIONAL VOLUNTARY GROUP HEALTH PROGRAM

(Continued from Page 12)

without a dissenting vote, gave wholehearted encouragement to the development of voluntary prepayment medical care plans by medical societies, and instructed that a national health program, based on voluntary group medical care plans be developed at once.

The report of the Reference Committee on Legislation and Public Relations stated in part:

"The committee recommends that the House of Delegates of the American Medical Association instruct its Board of Trustees and Council on Medical Service and Public Relations to proceed as promptly as possible with the development of a specific national health program, with emphasis upon the nation-wide organization of locally administered prepayment medical plans sponsored by medical societies."

A subcommittee of the Council on Medical Service and Public Relations was appointed and met in Toledo, the home of Chairman E. J. McCormick, M.D., on December 16, to develop the national program.

————MSMS Radio Hour, WJR, Detroit————

TWENTY-FOUR VOLUNTARY MEDICAL CARE PLANS IN TWENTY STATES

With Michigan Medical Service still leading in both size and growth, twenty-four medical care plans sponsored or approved by the medical profession now are operating in twenty states and in Hawaii.

Moreover, a number of other plans are in process of organization. Leaders of the Medical Service Plans Council of America expect that national enrollment will double during 1946 and that the nation will be completely blanketed with doctor-sponsored plans within the next few years.

The plans are working together closely in an endeavor to co-ordinate their activities, so that prepaid medical service sponsored by the medical profession already is assuming the status of a national movement while retaining the advantages of local control and service.

Most of the plans have entered into reciprocity agreements by which they agree to accept transfers of subscribers from other plans when subscribers move from one plan area to another. The agreements benefit the migrating subscriber in several ways.

The medical and surgical plan national enrollment now stands at nearly 2,000,000 persons, with Michigan Medical Service accounting for nearly half this figure. MMS reports a current enrollment exceeding 868,421 persons.

In addition to Michigan, medical or surgical plans are now organized in California, Colorado, Delaware, Hawaii, Iowa, Kansas, Massachusetts, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Texas, Washington, West Virginia and Wisconsin.

There are three plans in New York State and two in North Carolina.

A. S. BRUNK, M.D., HONORED

(Continued from Page 16)

tion, developed a pattern of "Modern Medical Public Relations."

John F. Hunt of Chicago, Vice President of Foote, Cone & Belding which conducted the Michigan Survey of Public Opinion for the Michigan Health Council in 1944, urged the "Formation of a National Health Congress."

The leader of the round-table discussion was E. J. McCormick, M.D., Toledo, Past President of the Ohio State Medical Association.

Four resolutions, embodying the recommendations of Drs. Howard, Gilman, Miller and Mr. Hunt, were adopted and referred to the AMA House of Delegates where they were subsequently given approval.

The delegates present voted to make permanent the Conference of Presidents and other Officers of State Medical Societies, and elected Dr. Brunk of Detroit as both President and Chairman of the Executive Committee. The President-elect is Philip K. Gilman, M.D., of California; the Secretary-Treasurer is Major Harvey T. Sethman of Colorado.

Members of the new Executive Committee are:

J. H. Howard, M.D., Connecticut, L. H. Schriver, M.D., Ohio and E. P. Coleman, M.D., Illinois (one-year term)

G. A. Unfug, M.D., Colorado, H. H. Bauckus, M.D., New York and N. K. Forster, M.D., Indiana (two-year term)

R. D. Bernard, M.D., Iowa, W. E. Vest, M.D., West Virginia and R. H. Graham, Oklahoma (three-year term)



Yes-we have no pana-C-eas

Needless to tell you, Doctor, vitamin C is ***not*** a cure-all. But—recent literature is replete with reports of good results obtained from massive doses of vitamin C in various allergies, particularly hay fever; in convalescence; in infectious diseases and toxic conditions; in some cases of gingivitis and pyorrhea; and in many other conditions due to vitamin C deficiencies.

Heretofore, Doctor, you have been handicapped because of the gastric irritation and acid-shift effects that so frequently result from large doses of ascorbic acid; but now SODASCORBATE has opened new horizons in vitamin C therapy. For the first time the profession is offered a dry, ***neutral*** vitamin C in tablet form, free from the gastric irritation that so frequently results from large doses of ascorbic acid.

Now you can take full advantage of the new vitamin C therapy offered by "Soda-C" (SODASCORBATE). You can administer ***full*** and ***frequent*** doses of vitamin C without these undesired side-effects. Each SODASCORBATE Tablet contains 120 mg. of sodium ascorbate, equivalent in vitamin C activity to 100 mg. (or 2000 U.S.P. Units) of ascorbic acid.

The average dose for adults and children over 12 years is one tablet 3 times daily; or as indicated by the condition. For children under 12, one-half tablet. For babies or very young children, one-fourth to one-half tablet may be crushed and dissolved in milk.

Supplied in bottles of 40 and 100 tablets, as well as in "hospital-size" bottle containing 500 tablets. For professional samples and covering literature, sign and mail the coupon.

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Please send professional samples of SODASCORBATE and 32-page monograph "New Horizons in Vitamin C Therapy."

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Legislative Jugglery

THERE are now TWO bills pending in Congress, EITHER of which would fasten upon the country a system of "socialized medicine" under federal control—and ONE of these bills is supposed to be a non-socialistic SUBSTITUTE for the OTHER.

This is a typically New Deal situation brought about in the following manner —

On May 24, 1945, Senators Wagner and Murray and Rep. Dingell introduced the so-called "General Welfare Bill."

That bill — a replica in 185 printed pages of the Beveridge "cradle-to-the-grave" plan in Socialist England — contained a "socialized medicine" scheme.

The second bill, designated as the "National Health Act of 1945," was introduced on Nov. 19, 1945, the day on which President Truman sent to Congress his message recommending "national health" legislation, and HAD OBVIOUSLY BEEN PREPARED BEFORE THE PRESIDENT'S MESSAGE WAS DELIVERED.

* * *

IN HIS message the President said: *"What I am recommending is NOT socialized medicine.*

"The American people want no such system.

"No such system is here proposed."

Announcement was made at Washington that THE PURPOSE of the "National Health Bill" was to CARRY OUT the President's policy.

It was therefore assumed that the "General Welfare Bill" would die and that Congress would be asked to pass NO BILL OF ANY KIND to inflict "socialized medicine" on the people.

Study of the new bill shows that the assumption was wholly mistaken.

In the first place, THE SPONSORS of the new bill are THE SAME TRIO who sponsored the "General Welfare Bill" — Messrs. Wagner, Murray and Dingell.

In the second place, the new bill presents EXACTLY THE SAME SCHEME of "socialized medicine" as does the "General Welfare Bill."

In fact, WHOLE PAGES of the "substitute" bill use PRECISELY THE SAME LANGUAGE as the "General Welfare Bill."

UNDER BOTH BILLS the surgeon general of the United States would dominate medical and hospital practice.

BOTH BILLS would set up "panels" of doctors and hospitals from which "beneficiaries" would be "free" to "choose," with non-panel doctors or institutions excluded from federal fees paid out of the "health insurance" fund.

Under BOTH BILLS virtually every one in the country would be forced into the "system" as "beneficiaries," since the term includes all wage and salary earners, officers of corporations, "self-employed" persons such as business or professional men, and their dependents.

The joint effect would be to compel the people to submit to "panel" medicine if they wanted "insurance" benefits paid by the government out of their own money, and to compel doctors and hospitals to become "panel" members if they wanted to continue in practice.

The "health insurance" scheme alone would cost, as closely as can be estimated, not less than FIVE BILLION DOLLARS A YEAR to be added to pay roll taxes or otherwise provided by Congress when the government is running a huge annual deficit and has a three-hundred-billion dollar war debt to pay off.

* * *

IT IS SOCIALIZED MEDICINE —and merely SAYING that it is not is futile.

Furthermore, the rest of the "General Welfare Bill" — from which the "National Health Bill" has been extracted — may not be dead, either.

Among the interesting — and perhaps enlightening — comments on the new bill is an editorial in the Communist Daily Worker on Nov. 21, 1945.

The Daily Worker said:

"The President has now proposed a far-reaching health and medical insurance program IN LINE WITH THE HEALTH PROVISIONS OF THE WAGNER-MURRAY-DINGELL BILL.

"He promises to follow up soon with a social security message WHICH WILL PRESUMABLY INCORPORATE THE REMAINING FEATURES OF THIS OVER-ALL BILL."

The Daily Worker is right — and it has predicted New Deal actions on many past occasions. —*Detroit Times*, December 12, 1945.

A physician asked us the question first—

A smoker himself, he asked: "What cigarette do most doctors smoke?"

We know that many physicians smoke, that many of them prefer Camels; but we couldn't answer the doctor's query.

We turned the question over to three nationally known independent survey groups. For months these three groups worked . . . separately . . . each one employing the latest scientific fact-finding methods.

This was no mere "feeling the pulse" poll. No mere study of "trends." This was a nationwide survey to discover the actual fact . . . and from the statements of physicians themselves.

> *To the best of our knowledge and belief, every physician in private practice in the United States was asked: "What cigarette do you smoke?"*

The findings, based on the statements of thousands and thousands of physicians, were checked and re-checked.

ACCORDING TO THIS RECENT NATIONWIDE SURVEY:

More doctors smoke Camels than any other cigarette



And by a very convincing margin!

Naturally, as the makers of Camels, we are gratified to learn of this preference. We know that no one is more deserving of a few moments to himself than the busy physician . . . of a few moments of relaxation with a cigarette if he likes. And we are glad to know that so many more physicians find in Camels the same added smoking pleasure that has made Camels such an outstanding favorite among *all* smokers.

CAMELS *Costlier Tobaccos*

R. J. Reynolds Tob. Co.
Winston-Salem, N. C.

MSMS House of Delegates Approves Michigan Foundation for Medical and Health Education, Inc.



The late A. P. Biddle, M.D., patron of medical and health education.

The Michigan Foundation for Medical and Health Education, Inc., sponsored by the Michigan State Medical Society, received the unanimous endorsement of its 1945 House of Delegates, on September 18. The full text of the resolution of endorsement follows:

WHEREAS, The purposes of the Michigan Foundation for Medical and Health Education, created by the Michigan State Medical Society, are "To acquire, provide, use, develop, endow, and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowship, and scholarships," and

WHEREAS, Many persons are seeking outlets through the medium of tax exempt foundations for their surplus funds, and

WHEREAS, numerous doctors of medicine and laymen would contribute to the Michigan Foundation for Medical and Health Education if they were made aware of its existence and its humanitarian purposes, therefore, be it

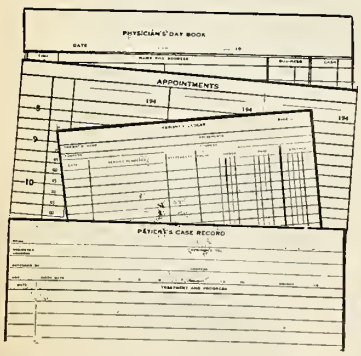
RESOLVED, That the House of Delegates of the Michigan State Medical Society earnestly invite individual members of the State Medical Society to contribute during life and in their last wills to the "Michigan Foundation for Medical and Health Education," and be it further

RESOLVED, That Michigan doctors of medicine be urged to encourage interested laymen to aid this worthy fund devised to benefit the health of our people through the aegis of a well-informed medical profession."

Over $47,000 Subscribed in Three Months

The list of contributors to the Michigan Foundation for Medical and Health Education, Inc., is increasing daily. The following persons and organizations have added their names to the growing list of donors to the Michigan Foundation:

Anonymous, in Memory of his Mother	$ 1,000
Barry County Medical Society	50
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85
C. D. Brooks, M.D., Detroit	1,000
J. D. Bruce, M.D., Ann Arbor	1,000
A. S. Brunk, M.D. Detroit	1,000
E. I. Carr, M.D., Lansing	1,000
L. G. Christian, M.D., Lansing	100
B. R. Corbus, M.D., Grand Rapids	1,000
C. V. Costello, M.D., Holland	1,000
H. H. Cummings, M.D., Ann Arbor	1,000
A. C. Curtis, M.D., Ann Arbor	15
Dickinson-Iron County Medical Society	80
A. C. Furstenberg, M.D., Ann Arbor	1,000
L. J. Gariepy, M.D., Detroit	1,000
Genesee County Medical Society	1,000
Robert W. Gillman, M.D., Detroit	1,000
Hillsdale County Medical Society	95
L. J. Hirschman, M.D., Detroit	1,000
L. E. Holly, M.D., Muskegon	1,000
Houghton-Baraga-Keewenaw Medical Society	140
R. J. Hubbell, M.D., Kalamazoo	1,000
Huron County Medical Society	55
Wm. A. Hyland, M.D., Grand Rapids	1,000
Jackson County Medical Society	350
Joint Committee on Health Education	1,000
Francis Jones, M.D., Lansing	1,000
Lenawee County Medical Society	125
Mason County Medical Society	35
Menominee County Medical Society	55
Michigan Medical Service	10,000
Mrs. Katharine B. Miner, Flint	1,000
H. L. Morris, M.D., Detroit	1,000
Muskegon County Medical Society	310
Lawrence Reynolds, M.D., Detroit	1,000
J. M. Robb, M.D., Detroit	1,000
St. Clair County Medical Society	220
G. B. Saltonstall, M.D., Charlevoix	1,000
E. F. Sladek, M.D., Traverse City	5,000
Ferris N. Smith, M.D., Grand Rapids	1,000
C. L. Straith, M.D., Detroit	1,000
Ralph Wadley, M.D., Lansing	1,000
H. L. Weitz, M.D., Traverse City	100
John O. Wetzel, M.D., Lansing	1,000
E. R. Witwer, M.D., Detroit	1,000



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EARL B BRINK, MANAGER
BILL O BRINK ASST MGR

January, 1946

Dear Doctor:

A doctor friend remarked the other day that whenever he signs one of our claim blanks for a patient, he feels he has taken one more important step toward helping him get well.

"Because," he explained, "loss of income and money worries cannot be cured by medicine. But they can handicap a patient's recovery. So it's a big help to a patient to know he's going to get a sure, steady income as long as he needs it from Mutual Benefit Health and Accident Association."

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MSMS President Morrish Honored by His County Society

Ray S. Morrish, M.D., Flint, was feted by officers of the Michigan State Medical Society and the membership of his County Medical Society in honor of his recent election as President of the Michigan State Medical Society. The testimonial dinner of December 12, 1945, was given by the Genesee County Medical Society at the Flint Golf Club. Donald R. Brasie, M.D., Flint, President of the County Society, welcomed the guests and members and introduced D. R. Wright, M.D., Toastmaster.

Words of congratulations and appreciation were offered by MSMS Speaker P. L. Ledwidge, M.D., Detroit, Councilors O. O. Beck, M.D., Birmingham, Fred H. Drummond, M.D., Kawkawlin and R. C. Pochert, M.D., Owosso and by Secretary L. Fernald Foster, M.D., Bay City, Treasurer A. S. Brunk, M.D., Detroit, by Past-President H. H. Cummings, M.D., Ann Arbor, and Executive Secretary Wm. J. Burns, Lansing.

Two Past-Presidents of the Michigan State Medical Society residing in Flint, H. E. Randall, M.D., and Henry Cook, M.D., also eulogized President Morrish on his labors in behalf of organized medicine.



Ray S. Morrish, M.D. (right), being congratulated on his recent election as president of the Michigan State Medical Society, at Genesee County Medical Society Testimonial Dinner, Flint, December 12. A. S. Brunk, M.D., Detroit, immediate past president, shakes hands with the new president while Donald R. Brasie, M.D., president of the Gensee County Medical Society, looks on.

The Dean of Flint Medicine, Wm. H. Marshall, M.D., gave the final toast to the guest of honor, who responded briefly.

One hundred and twenty-five physicians were present at the Testimonial Dinner.

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Political Medicine

COMPULSORY HEALTH INSURANCE

The Review read, as no doubt many of the customers did, the text of President Truman's proposals on national health insurance. And thought it was a good idea. And wondered, as has been the case with a good many other good ideas, how it would work. Long ago, our newspaper was saying that there had to be a way to build up a protection against the money demands of sickness emergencies. There were a good many assurances that it couldn't be done. The insurance companies said that sort of thing wasn't insurable; that there wasn't any actuarial process for doing it. When a man finally came to town with a plan for hospital insurance—blazing a trail in the forest, he was—the newspaper asked why he didn't add on doctors' fees and the answer was that this part of it couldn't be done—not possibly. The newspaper took on the man's hospital insurance, experimental as it then was, and in one form or another, through one agency or another, it has been carried on in the newspaper office ever since, and it now includes medical and surgical care as well as hospital fees. Like a good many other things that obviously had to be done, a way was found to do it. It's vastly to the credit of our own medicos here in our town—and maybe it's a fact that is not generally remembered—that they, sensing the need and not believing that what was in the way was a complete barrier, went to work and formed an insurance system covering medical and surgical, leaving undisturbed the old, and necessary, confidential relations between patient and physician and with free choice to the former to select the latter—and have made an outstanding success of it.

The Review can't get away from the idea that what a citizen, lady or gent, does for himself or herself, by his own choice is better and is better done than when the government has to do some of the planning and compelling there. But the least amount necessary, the better, *The Review* thinks.

And after all's said and done as the President said it and hoped to do it, about the imperative value of good health and raising the health standard the fact remains that health is of two kinds—mental as well as physical.

And the signs indicate from time to time that there's enough mental croup and dyspepsia loose so that the country will be menaced by what Mr. Truman was talking about as the ravages of illness, even though everybody should physically be bred up as Sandow the Strong Man. And so the question, What are you going to do about that, in fashioning the governmental plans for the brave new world?—A. L. Miller's column—The Review, *Battle Creek News,* Nov. 25, 1945.

* * *

PUBLIC HEALTH SERVICE MEDICALLY SPONSORED

Sparked by Michigan and the meeting of the presidents of seventeen state medical societies in Detroit and ten in Denver, the State Medical Societies of eleven states have formulated principles upon which the Social Security acts of the states or nation should be based if the best of health and medical service is to accrue to all the people: those who pay their own bills and have no problem of finance; those who pay none or little of their bills and likewise have little or no worries; and the great class of ordinary people who strive and mostly do pay their own bills, but have plenty of financial worries. The Social Security system was set up primarily to meet the need mostly of this third class, and blithely forgot the second class.

There are several bills in the national Congress now, (Wagner, Murray, Dingel S. 1050, and H.R. 3293. The Pepper Bill S. 1318, for maternity service to all, and as of November 19, the Dingell Bill H.R. 4730, and a like one in the Senate S. 1606 all of which will socialize medicine despite the statement of President Truman. These bills were written from the ideas of their sponsors, with, they claim, consultation of medical men. There is one great group of people who should have been consulted in the formulation of such far-reaching plans, the medical and dental professions who will be doing the work. The private practitioners and the state and national medical

(Continued on Page 36)

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2. IRON UTILIZATION IS SIMILARLY MORE COMPLETE.
3. GASTRO-INTESTINAL TOLERANCE IS NOTABLY SATISFACTORY—even among patients who have previously shown marked gastro-intestinal reactions following oral administration of other iron preparations.

INDICATED IN: Hypochromic (iron-deficiency) anemias caused by inadequate dietary intake or impaired intestinal absorption of iron; excessive utilization of iron, as in pregnancy and lactation; chronic hemorrhage.

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PUBLIC HEALTH SERVICE

(Continued from Page 32)

associations have been studiously and completely ignored. Their advice in planning medical practice was not sought.

Now that the President has endorsed "compulsory health insurance," and Wagner, Murray and Dingell have introduced new bills setting up his plans, it becomes the imperative duty of those who do know something about the health services that will be involved to step in and guide the legislation along lines that will be safe for the life and well-being of the American people. With that in mind, and with a true desire to be helpful and forestall mistakes that may be tragic, these eleven state medical societies, through their committees have offered sets of principles that have been condensed as follows:

Resolution Re Health Legislation Beneficial to the People

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore be it

RESOLVED, That the following principles for a health legislation program be adopted:

1. Establishment in the President's Cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians, and under whose jurisdiction every federal bureau and office, whose duties are related to health and medical welfare, shall be grouped.

2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care, by government grants-in-aid.

3. Provide federal or state loans, or guarantees of private loans, for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled, and carried on by those who own such facilities and by the medical profession.

4. (a) Established state-wide voluntary non-profit health care programs, in every state, based on the free choice of purveyers of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractural arrangement for payment of charges from county, state, or federal funds; as a service plan for all other governmental categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law.

   (b) Any further federal or state programs for expansion of medical service to be developed within the structure of the above described program.

   (c) National co-operation with the proposed plans of Maj. Gen. Paul R. Hawley of the Vet. Adm. in the therapeutic administrations to veterans for service-connected disabilities. Also for the development of veterans facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments.

   (d) All state-wide medical care programs on either a service or indemnity care basis shall be incorporated under special state enabling acts or by already existing state statutes relating to non-profit producers' cooperatives. This will provide for either a pre-payment or a reimbursement contractural service.

   (e) Group co-operation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) program, should be accomplished.

5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to advise all of the people with respect to proven measures to prevent illness, hygienic and sanitary measures, and where to go to seek help when ill or injured.

6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans.

RESOLVED, That every state medical society be invited to study, adopt and activate these principles on the state level, and that they be submitted to the AMA Council of Medical Service and Public Relations for immediate consideration as a pattern for a national health program.

* * *

The principles adopted by these State Medical Societies were set forth in eighty-nine paragraphs with a surprising similarity of opinion. We quote a few in proof of such unanimity of thought all over the nation:

1. "A medical care program to be successful must be a program which can offer *good* medical care for *all* the people." (Quoted from Michigan. Also suggested by Wyoming, Colorado, Iowa, Indiana, Washington, California, and Pennsylvania).

2. "It should be a program based upon broad liberal Americanism, and not confined by the dictatorial tenets of national socialism, or of communistic patterns." (Quoted from Colorado. Also suggested by Michigan, Wyoming, Iowa, Connecticut, Indiana, Washington, Kansas and Pennsylvania).

3. "We believe that the rapid development of voluntary plans for prepayment of the costs of hospital and

(Continued on Page 38)

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PUBLIC HEALTH SERVICE

(Continued from Page 36)

medical care indicate that the wage earners can be assisted materially to meet his needs for essential medical care. The Federal Government should aid and encourage such voluntary plans and should not resort to a costly system of state medicine until voluntary plans have been found ineffectual." (Quoted from Connecticut. Also suggested by Iowa, Colorado, Wyoming, Michigan, California, Washington, Kansas, and Pennsylvania).

4. "It is our belief that the Federal Government in this medical instance can do best by the encouragement of state-wide co-operatives through either loans or technical aid, and reserve their outright cash grants for the purchase of medical care certificates for those unable to purchase their own prepayment security. Any other approach, under whatever terms, becomes an extra-curricular government activity, and is but the first determining step down the very short road to federal serfdom." (Quoted from Michigan. Also suggested by Colorado, Washington and Connecticut).

5. "It is in the public interest that the human factor in Medical care be thoroughly recognized; the sanctity of the patient-physician relationship must be maintained; and that the method of providing medical care must not become enmeshed in bureaucratic red tape and a system of tickets, coupons, questionnaires, and other political controls and delays." (Quoted from California. Also suggested by Michigan, Colorado, and Washington).

6. "A sound health program for the nation calls for a Federal Department of Health and Welfare with a Secretary in the President's cabinet. In this department should be included all the federal agencies having to do with social security and health, including the hospital system of the Veterans' Administration. It should not however include those health agencies peculiar to the establishments of the armed forces." (Quoted from Connecticut. Also suggested by Indiana, Washington, Kansas, Wyoming, and Iowa).

7. "The laws and regulations governing the Veterans Administration should be modified to decentralize the medical and hospital care of disabled veterans, in order to permit civilian hospitals and physicians in private practice to have a greater part in the rehabilitation of disabled veterans." (Suggested by Ohio, Kansas, Michigan, Colorado, Iowa, Connecticut, Indiana, Wyoming, and Pennsylvania).

8. "Adequate federal funds should be made available for the furtherance and correlation of research in the various fields of medicine under the direction of the secretary of Health and Welfare." (Quoted from Kansas. Also suggested by California, Washington, Indiana, Michigan, Colorado, and Connecticut).

Such are the broad principles outlined by several states. Many policies of more specific nature are suggested by individual, states. Eighty-nine paragraphs in all were submitted in addition to the fourteen points from the American Medical Association. We are publishing these selections to help keep our members informed, and to stimulate further thought and suggestions, which the Committee welcomes.

* * *

"THE MICHIGAN PLAN"

The *Rocky Mountain Medical Journal* for October, 1945, contains the presidential address of George A. Unfug, M.D., delivered at the seventy-fifth annual meeting of the Colorado State Medical Society, September 27, 1945 at Denver. It occupies over eight pages and is most interesting reading. We shall quote from it extensively, while puffing with pride for Michigan.

"Many subjects came to mind in considering a topic for this address, but all were discarded when I had the opportunity of listening to an enthusiastic group of doctors from the State of Michigan a few weeks ago. They so completely convinced me that I have chosen to title this address "The Michigan Plan." This is done, not with the idea of copying an idea, but rather in recognition of a constructive, affirmative action by a group of medical men—something almost unique in our profession." . . . "I do not believe the average citizen is anxious to have his family's medical care directed from Washington. However, he does want an improvement in the method of furnishing medical care. Results of several opinion poles are proof of this statement. If the medical profession will not supply this, he will soon welcome a plan promulgated by the social planners."

"Most of us do not fear innovations. We do fear socialized medicine with its attendant bureaucracy. Many people, including the Surgeon General of the U. S. Public Health Service, plead ignorance of what we mean by socialized medicine. For their benefit, I will give a very simple definition—it is government control of the private practice of medicine." . . .

"I do not intend to discuss the Wagner, Murray, Dingell Bill, and mention it only to condemn its contents and praise its promoters for producing the stimulant that has brought forth the first feeble flicker of life from a profession whose economic head has been buried in the sand so long that symptoms of suffocation were becoming quite evident."

"A United States Senator . . . suggested that the medical profession do something constructive in the field of medical economics even if it entailed federal legislation. The Michigan State Medical Society organized a drafting panel which drew up a plan after a tremendous amount of work and study . . . This plan was enthusiastically received at a meeting in Detroit on April 27-28, 1945, attended by the presidents of seventeen eastern and midwestern state medical societies. From this meeting came a resolution urging all

(Continued on Page 40)

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THE MICHIGAN PLAN

(Continued from Page 38)

seventeen state societies to set up drafting panels to formulate similar medical care programs. Denver was selected as the site for a similar meeting of western states June 28-29, 1945, and we were invited as one of those nine western states. Similar action was taken at the Denver meeting. As soon as approval can be obtained from their respective states there will be twenty-six drafting panels or committees working on this problem . . .

"All of these plans will be studied by a committee consisting of the presidents of the various state medical societies, with the President of the Michigan State Medical Society as chairman, at a meeting to be called as soon as a sufficient number of plans have been submitted. From such a meeting it is reasonable to believe that specific suggestions can be formulated to carry out the broad principles of the original Michigan Plan.

"The American Medical Association has recognized the need for such a program, and three months following the first presentation of the Michigan Plan it published, in the July 21, issue of THE JOURNAL, a Constructive Program for Medical Care. The scope of the two programs is much the same. Perhaps now we can present a united front. I compliment the AMA upon this broad step, which I consider one of the most far-reaching and constructive ever taken by the AMA."

"The Michigan Plan and the program of the AMA are both based on the premise that any medical care program, to be successful, must be a program which can offer GOOD medical Care to ALL the people. To quote the Michigan Plan, "It should be a program based on broad liberal Americanism and not confined by the dictatorial tenets of national socialism or communistic patterns."

"Michigan Medical Service has demonstrated that a voluntary plan can be successful and still meet the desires of the people for an improved method of meeting the costs of medical care. From the studies made in Michigan and from their actual experience, it can be stated with reasonable certainty that the majority of the people do not need or desire complete coverage against all costs of medical care. One example is, I believe sufficient to bear this out. During the time that Michigan Medical Service acquired 7,000 subscribers with an over-all coverage, there were over 250,000 who obtained surgical coverage alone."

Doctor Unfug discusses the low cost of operation of the non-profit prepayment medical plans, around 11 per cent, as against the overhead of about fifty per cent of commercial companies and the unpredictable costs of administering the Wagner, Murray, Dingell Bill. He points out that a small proportion of our population is financially able to withstand catastrophic illnesses without thinking of the cost. Another small proportion does not desire and will not use medical care under any circumstances. Hence a very large section of our population is cared for satisfactorily at the present time. "The remainder of the population is where the Michigan Plan enters the picture. Since colonial times medical care of these without funds has been considered a responsibility of local governments. Social security and old-age benefits have changed all this so that it has become the responsibility of local, state and federal governments. Since this has been and is true, why go to the extreme of revolutionizing the practice of medicine by a complete and untried system of bureaucratic medicine when a comparatively simple change in the method of providing this care will improve the quality of care received by these people and still allow us to continue with a system of practice that has produced the highest health standards in the world? This change would consist in the purchase by the government, local, state or national, of memberships, or medical care certificates in a non-profit medical service plan, for their respective clients."

In the same number of the *Rocky Mountain Medical Journal* appeared articles on "Michigan's Experience with Commercial Medical Radio Broadcasting," by A. S. Brunk, M.D., of Detroit; "Progressive Public Relations by a State Medical Society" by E. F. Sladek, M.D., of Traverse City, and "Discussion on Planning Panel," by P. L. Ledwidge, M.D., of Detroit. The September number of the *Rocky Mountain Medical Journal* contained an article by L. Fernald Foster, Bay City, Secretary of the Michigan State Medical Society, on "Prepayment Medical Care Plans."

* * *

STATE HEALTH PROGRAM LEADS THE ENTIRE NATION

The continued drift of the Nation towards state socialism, although to a lesser degree than is in the case of England under the Attlee labor government, is illustrated by President Truman's message to Congress (Nov. 19) advocating national compulsory health insurance.

It is not the presumptuous intention of this column to proclaim judgment on the merits of national health insurance. We do feel, however, it is proper and timely to present the viewpoint of the average Michigan physician and surgeon, as represented by his state professional organization, and to outline briefly the general issue involved.

Medical care is a subject that reaches into the intimate lives of every man, woman and child in every community of Michigan.

(Continued on Page 42)



1946

ARMOR AND ARMAMENTARIUM

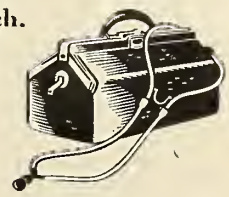
Guns are silent and grass grows in the foxholes, but there can be no peace treaty in the endless war on mankind's immortal enemy—Disease. Home comes the physician from his lifesaving on the battlefields of man-made death abroad to march again beside his colleagues who have so valiantly held the casemates of health at home.

Battle front and home front, boulevard and dirt road, the mighty facilities of the medical center and the challenge of practice in the lonely farmhouse—all are the front line trenches in humanity's continuing crusade to tame cannibal protoplasm. There is no discharge in that war.

The first cry of pain in the world was the first call for a physician. It has been answered as it echoed down the centuries; it will be answered in the unrolling years of the future.

As this questioning year of 1946 opens with the world convalescing from malignant political disease, we would like to claim the privilege of welcoming the thousands of physicians returning from unparalleled service on war fronts—of saluting those who shouldered such heavy burdens at home—of expressing the confidence that the traditional unity of the profession armed with new and potent weapons will drive the front lines of the war on disease ever forward.

We know that we are joined in this expression by all organizations which seek to play their roles, large and humble, as institutions of supply to those "bound by the covenant and oath, according to the law of medicine." S. H. CAMP AND COMPANY, Jackson, Mich.



STATE HEALTH PROGRAM

(Continued from Page 40)

Health insurance typifies the growing controversy over voluntary vs. compulsory action as a solution of our many complex problems.

Prior to World War II, compulsory health insurance had been adopted by twenty-nine countries with a combined population of more than 500,000,000.

Five additional nations, as a substitute for compulsory health insurance granted government subsidies to volunteer organizations (sponsored by doctors) which insured their members in an acceptable manner. They are: New Zealand, Belgium, Sweden, Denmark and Spain.

The American movement began about 1915 following the adoption in England of the British Insurance Act of 1911. However, the idea was not received here favorably at the time. The American Medical Association went on record against it in 1920; among the critics were insurance companies, many employers' organizations, druggists and patent-medicine manufacturers, the American Federation of Labor through President Gompers and the executive council, and several religious groups. It was denounced as being un-American, socialistic, a wrong method of attack, and a death blow to the personal relationship between doctor and patient—just to mention a few objections.

After considerable discussion, the Michigan medical profession chose to do something about it.

The Michigan State Medical society, 4,800 members strong with William J. Burns as a talented and capable executive secretary, evidenced its progressive leadership by recognizing the basic need for prepaid health insurance.

Instead of compulsory insurance under government control, the Michigan remedy was this: Two volunteer non-profit corporations, the Michigan Medical Service and the Michigan Hospital Service, each chartered by the state legislature in 1939 whereby any citizen is eligible to subscribe to low-cost insurance covering both medical and hospital expenses.

Today the Hospital Service has more than 1,000,000 members; the Medical Service, close to 900,000. No other state health insurance program has begun to approach this outstanding success. Michigan not only leads the entire country; it leads the world.

Paradoxically, Michigan's progress reveals and emphasizes a weakness of the American medical profession.

While 868,000 persons are now insured in Michigan against medical expense incurred during ill health, only 200,000 are so protected in Massachusetts and 175,000 in California, second and third ranking states in voluntary health insurance.

To dispel the apathy prevailing elsewhere, the Michigan medical society last April invited presidents of seventeen state groups in the Middle-West to a conference in Detroit. Its success led to the calling of a western regional conference in Colorado last June for ten states.

And finally, in an effort to induce national action, the co-operating twenty-seven states—led by Michigan—are sponsoring a national conference in Chicago, Sunday (December 2).

While Michigan leaders remain discretely silent, doctors admit privately that Michigan's leadership has not received the blessing and support of the august and distinguished American Medical Association which remains officially aloof, now as in the past, from the field of social insurance.

The dilemma of Michigan doctors is clear.

No matter how perfect Michigan's insurance program may become, Michigan alone cannot stem the spreading tide of socialized medicine.

Unless all state medical societies co-operate for positive local action, some degree of national health insurance appears now to be inevitable within a decade. Our economic loss due to illness is tremendous. Quoting President Truman: "On the average day there are about 7,000,000 persons so disabled by sickness or injury that they cannot go about their usual tasks."

The number of days lost by illness is forty times greater than the time involved in industrial strikes over a ten-year period.

Forty per cent of counties in the United States lack a hospital; this deficiency is particularly severe in rural areas.

You can't blame the Michigan doctors for being genuinely concerned. If voluntary medical insurance can meet the challenge, national insurance and control may be averted. Can the "forest fire" be stopped? Is there time?

It is another test of the free enterprise system; of voluntary co-operation vs. state collectivism.

History insists that every great war is followed by drastic change. A shary swing to the left, bringing socialization of our modern economic life, would inundate the institution of private medicine just as it would everything else. The doctors' dilemma affects us all.—Gene Alleman, Michigan Mirror State News Letter, (November 29), 1945.

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Medical Veterans' Readjustment

DUES OF MILITARY MEMBERS

Medical veterans, members of the Michigan State Medical Society, who return in 1945 will be accorded remission of MSMS dues and assessments for the balance of 1945 and for all of 1946.

Medical veterans returning during the first six months of 1946 will have all MSMS dues and assessments of 1946 remitted.

For medical veterans returning during the last half of 1946, the MSMS dues and assessments for the remaining months of 1946 plus all of 1947 will be remitted.

This arrangement was ordered by the Executive Committee of The Council at its meeting of November 8, 1945.

INTERESTING BOOKLETS OF INFORMATION

1. "While *You* Were Away" is an easily read booklet outlining the benefits for veterans. It was written by C. Raymond VanDusen, Capt., AGD of the Redistribution Station of Hot Springs, Arkansas. Copies of this informative publication may be obtained by writing the author.

2. "Information Bulletin for Medical Officers," prepared by the Bureau of Information of the A.M.A., is a booklet designed specifically for use of doctors of medicine being separated from military service. It is available without cost by writing the Bureau of Information of the American Medical Association, 535 N. Dearborn, Chicago 10, Illinois.

ATTENTION, MEDICAL VETERANS!

1. Have you renewed your State Narcotic License? Contact the Michigan Board of Pharmacy, 502 Olds Tower Bldg., Lansing 8, F. H. Taft, Director of Drugs and Drug Stores and Secretary of the Board.

2. Have you renewed your federal narcotic license? Contact the U.S. Bureau of Narcotics, 802 Federal Bldg., Detroit, Michigan.

3. Have you converted your military malpractice insurance policy to a civilian malpractice insurance policy? If not, do so at once. The military coverage does not protect you in civilian practice.

4. Your Michigan license to practice medicine has not been affected by your absence in military service. No annual reregistration exists in Michigan. Do nothing about your license to practice medicine, as no action is necessary.

5. Relocation: For information, contact the Chairman of Michigan Procurement and Assignment Service, Davidson Bldg., Bay City, Michigan; also contact your county medical society.

6. Postgraduate medical opportunities — contact the Michigan State Medical Society, 2020 Olds Tower, Lansing 8, Michigan, and your county medical society.

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Juris ignorantia est, cum jus nostrum ignoramus—Old Maxim

NOTES ON COURT DECISIONS, STATUTES AND OTHER AUTHORITIES

J. JOSEPH HERBERT, LL.B., General Counsel MSMS
Manistique, Michigan

PRACTICE OF MEDICINE BY COSMETOLOGIST

People v. Gilbert
312 Mich. 520

Although it made no new law, the very recently decided case of People v. Gilbert, 312 Mich. 520 (October 8, 1945), presented an ingenious scheme of a naturopath to practice medicine in the guise of a cosmetologist.

Attracted by a street sign reading, "Clear Skin Institute," a young woman (later the complaining witness), having trouble with her complexion, entered the office of the defendant. On the door appeared the name of the defendant, Neil E. Gilbert, with the suffix "N.D.," and on the interior walls there hung a number of diplomas, impressive in appearance, bearing his name with "N.D." after it. After she was seated, the defendant asked her name and address, where she worked, whether she had gone to any other doctors, whether she had been sick within the last year, whether she menstruated regularly or had trouble with her bowels. The defendant diagnosed her trouble as acne and assured her that he could effect a cure. Being so persuaded, the young woman made arrangements to come twice a week for the "cure," at $5.00 per treatment. She paid the defendant $12.00 in advance, for two treatments plus $2.00 for a "registration fee." She was given a registration card which on its face stated:

"I, Neil E. Gilbert, Director of the Clear Skin Institute, hereby agree to treat Miss Betty Jane Heil for a period of 30 days from the above date under the following conditions:

"There shall be no further payments made by her during this period and in event that no improvement is shown in her complexion during this period, I shall refund all and any moneys paid to date for five visits or treatments already received.

"Miss Heil and members of her family shall be the sole judge as to whether or not there has been any improvement. However, if there is improvement, Miss Heil will pay me for whatever visits she received up to that date.

(Signed)
"Neil E. Gilbert."

On the back of this card was the following:

"You are accepted for the 'Dermedic Method' of 'Skin Clarification,' by the Foundation, under the following conditions:

"Appointments should be met at the appointed time, to avoid the possibility of overcrowding.

"If unable to keep appointment kindly telephone TEmple 1-7800 and a new appointment will be made for you.

"Two consecutive appointments missed without notice cancels this registration.

"This registration covers 'Skin Clarification' only. No medical service or advice is rendered hereunder.

"Clear-Skin Foundation
"10 West Warren cor. Woodward
"Detroit, Michigan
"TEmple 1-7800"

Thereafter she received five treatments which consisted in using a lamp and some salve and on one occasion in the extraction of blackheads and the opening of pimples on her face. When the "patient" found the treatments both painful and ineffective she called the Better Business Bureau and the Wayne County Medical Society and learned for the first time the defendant was not a doctor of medicine.

Fortified with this information, she returned to the office of the defendant and asked him if he were a doctor. When he asserted that he was, she remonstrated that the Wayne County Medical Society knew nothing about his being a doctor. He then told her that he was a Doctor of Naturopathy and offered to return $5.00. This she refused to accept.

The defendant was thereupon prosecuted for practicing medicine without a license. His defense was that he was a licensed cosmetologist and that the treatments given the complaining witness constituted merely the practice of cosmetology, and not that of medicine.

At the trial it was made to appear that there was nothing in the defendant's place of business to indicate that he was a cosmetologist, such as beauty tables, manicure tables, hair dryers or any of the usual instruments found in a so-called beauty parlor. Nor was there at any time during the complaining witness' visits to the defendant's office any reference made to his being a beauty operator or a cosmetologist or anything else except a physician or medical doctor. There was testimony regarding the confusion caused by the similarity between the designations "N.D." and the usual "M.D." As part of the people's case Dr. Shaffer, after fully qualifying as an expert on skin diseases, testified that acne is a human ailment which is classified as a disease. He also stated that papular acne might be quite similar to secondary syphilis, hard to differentiate even by an ordinary physician without special training in dermatology, saying, "it

(Continued on Page 85)



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Literature sent to physicians on request

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Principles of a National Health Program Proposed by the Medical Profession

Resolution Re Health Legislation Beneficial to the People

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore, be it

RESOLVED, That the following principles for a health legislation program be adopted:

1. Establishment in the President's Cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians, and under whose jurisdiction every federal bureau and office, whose duties are related to health and medical welfare, shall be grouped.
2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care, by government grants-in-aid.
3. Provide federal or state loans, or guarantees of private loans, for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled and carried on by those who own such facilities and by the medical profession.
4. (a) Establish state-wide voluntary non-profit health care programs, in every state, based on the free choice of purveyors of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractual arrangement for payment of charges from county, state or federal funds; as a service plan for all other government categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law.

   (b) Any further federal or state programs for expansion of medical service to be developed within the structure of the above-described program.
   (c) National co-operation with the proposed plans of Major General Paul R. Hawley of the Veterans Administration in the therapeutic administrations to veterans for service-connected disabilities. Also for the development of veteran facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments.
   (d) All state-wide medical care programs on either a service or indemnity care basis shall be incorporated under special state enabling acts or by already existing state statutes relating to non-profit producers' co-operatives. This will provide for either a pre-payment or a reimbursement contractual service.
   (e) Group co-operation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) programs, should be accomplished.
5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to advise all of the people with respect to proven measures to prevent illness, hygienic and sanitary measures, and where to go to seek help when ill or injured.
6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans, and be it further

RESOLVED, That every state medical society be invited to study, adopt and activate these principles on the state level, and that they be submitted to the AMA Council on Medical Service and Public Relations for immediate consideration as a pattern for a national health program.

TERMINATION OF HEALTH PROJECTS UNDERTAKEN AS WAR MEASURES

At the invitation of the Director of the State Board of Health a special committee, from the Executive Committee, met with the Board on October 11. The subject matter discussed was the position of the Executive Committee of the State Society in regard to continuation of the venereal disease clinic at Delgado Memorial. The meeting was opened by explanatory remarks by the President of the Board of Health after which the members of the special committee presented the attitude of the Executive Committeein desiring that the clinic be discontinued. The committee also answered questions from various members of the Board as to the ability of the medical profession to take over this work after it is discontinued by the Board of Health.

While not on the agenda for discussion, the question of extending the EMIC program was also discussed and the members of the group presented to the Board the reasons for the medical profession's desire to discontinue this service in accordance with agreement in 1943.

The committee was received very cordially and hospitably and Dr. Brown, for the Board, expressed thanks for such co-operation on behalf of the Executive Committee of the State Society. He stated he wished to assure the State Society that the Board is most desirous of co-operating and accepting the wishes of the medical profession in these vital matters.—Louisiana State M. S. (Nov.), 1945.

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A New Interpretation of Some So-Called Positive Patch Tests

With Special Reference to Metals Used in Industry

By S. William Becker, M.S., M.D.
Chicago, Illinois

Clinical Professor of Dermatology
University of Chicago



One of the greatest single advances in dermatology has resulted from the utilization of the so-called "patch test," originated by J. Jadassohn[7] in 1895, studied intensively by Bloch and his coworkers in Europe and by Sulzberger[13], Peck[10] and others in the United States. Sulzberger[13] aptly states: "In the eczematous reaction to patch tests—and in no other form of human allergy in which skin tests have been so extensively employed—the reaction to the test consists in the actual reproduction of the disease (in miniature)—and takes place in the very organ clinically affected." He also gives the following warning, familiar to you who are constantly making such tests: ". . . the demonstration of specific allergic hypersensitivity by means of the patch test may suggest, but does not necessarily prove, that the allergen was the cause of the presenting clinical dermatitis." He warns further: "There are, for example, many difficulties and inexplicable findings in the practical use of the patch test, and the results are by no means always uniform nor always clear cut." The author wishes to discuss and attempt to clarify some of the difficulties encountered in the interpretation of cutaneous reactions to certain metals used in industry, namely—nickel and chromium.

It will be advisable to first review findings of a general nature, the principles of which seem to be violated in the cases to be presented. The author and Obermayer[2], in collaboration with Praver, Shaw and F. T. Becker, presented, in 1936, a series of patients with what we considered to be functional dermatoses on whom we had performed patch and scratch tests. We stated at the time that epidermal hypersensitiveness as manifested by positive patch tests is seldom if ever found in patients with functional cutaneous diseases. Since that time, the author has observed positive patch tests in patients with lichen planus and vitiligo, both of which conditions we included in the functional group. Such positive patch tests have never been observed, however, in neurodermatitis of either the dry (atopic eczema) or exudative (nummular eczema) varieties or in pompholyx (dyshidrosis), which is closely related to if not identical with exudative neurodermatitis. Sulzberger[13] stated that the ordinary vesicular patch is seldom seen in atopic eczema, but adds: "A fairly representative proportion of our cases of atopic dermatitis manifests papulopustular reactions to certain salts of heavy metals, arsenates, et cetera, and, in particular, to nickel sulfate when applied as patch tests. This finding confirms that of Steiner and of others. This reaction to heavy metal salts has not yet been properly evaluated in relation to atopic dermatitis or to any other disease. However, its papulopustular nature and its course differ from the usual response seen to patch test in typical allergic eczematous hypersensitivity. These two, to my mind obviously different, forms

Presented at the Seventy-ninth Annual Session of the Michigan State Medical Society, Grand Rapids, September 29, 1944.

of reaction cannot be regarded as being of identical significance. As yet unpublished studies of Joseph Goodman, David Satenstein and myself tend to confirm the opinion that these reactions are different in morphe and nature from eczematous skin reactions based on specific sensitization. They seem to be a particular form of non-allergic, primarily irritative or intrinsically damaging local effect." The author cannot agree with this interpretation, but feels that the reaction is allergic, as will be explained.

In discussing exudative neurodermatitis (nummular eczema), Sulzberger stated: ". . . in no case have I been able to demonstrate conclusively the causal role of any known eczematogenous allergen." He does not mention the occurrence of positive reactions to salts of metals, such as nickel sulfate, in this disorder.

The following two case reports illustrate the difficulties in interpreting cutaneous reactions following application of salts of metals (nickel and chromium) to the skin:

Case 1.—Mr. J. E., aged twenty-nine, stated that he had been working for nine years (since 1935) as a draftsman. During this time, he had worked continuously with the same materials. On August 22, 1938, he entered the employ of a certain company as a draftsman. On December 5, 1939, he noted a pruritic eruption on the left third and fourth digits and on the outer side of the left palm. He is left handed. At a druggist's suggestion, he applied mycozol ointment, which aggravated the condition. He was seen by a dermatologist, who reported the presence of vesicular dermatitis in fairly well defined patches on the extensor surfaces of the fingers and on the palm, in areas corresponding quite accurately to the parts which touched the paper with which he worked. The patches were covered by scales and crusts. Examination of the feet revealed macerated skin between the fourth and fifth toes of the right foot. Examination for fungi was reported as negative, both on the feet and hands. Patch tests performed with materials with which he worked revealed slight papular dermatitis on a pinkish red base which was confined to the area of contact by brown ozalid tracing paper. Diagnosis was made of dermatitis venenata felt to be caused by contact with the brown ozalid paper. The eruption improved under treatment, but recurred occasionally.

On September 16, 1942, he was seen by a second dermatologist, who reported a vesicular, papular eruption on both hands. Patch tests were positive to eradicator fluid and to nickel. Fungous vaccine test was reported positive. The method of testing was not mentioned.

On February 9, 1943, a third dermatologist made a diagnosis of nummular eczema.

On March 6, 1943, a company nurse reported that the patient was no longer working in the engineering department, during which time the eruption had become more severe, worse than it had ever been. At that time, he remained away from work for approximately fifteen weeks, during which time he was re-examined and treated by the second dermatologist whom he had previously consulted. He was patch-tested to fifty materials and was reported to have had positive patch tests to eradicator, nickel, benzine, cobalt, lead and turpentine. All skin tests to foods, pollens, beverages, epidermals, et cetera, were negative. The technique of the tests was not reported.

On June 14, 1943, the patient returned to general office work, but stayed away from the drafting department. Tiny blisters appeared occasionally on his fingers.

On June 28, 1943, the condition having become much worse, he consulted a fourth dermatologist, who made a diagnosis of dyshidrosis, which was considered to be a neurogenic eruption. The condition became aggravated to involve both hands and feet, with some sort of eruption on the body. From July to October, 1493, when he was not working at the plant, he had some of his worst attacks.

He was first seen by the author on May 2, 1944, at which time he presented circinate patches of exudative dermatitis on the dorsal surfaces of the hands and on the second, third and fourth digits, with a patch of vesicular dermatitis on the left palm. Diagnosis was made of pompholyx (dyshidrosis) and exudative neurodermatitis (nummular eczema). Results of patch tests were as follows: benzine and olive oil (equal parts), turpentine and olive oil (equal parts), ozalid print, ozalid transparent, B & W transparent, B & W print, vellum, tracing cloth, blue print paper, B & W eradicator, ozalid eradicator—all negative. A five-cent piece containing nickel produced a follicular, papulovesicular eruption.

Further tests were made, as follows: On the back: 10 per cent aqueous nickel sulfate produced a severe edematous and vesicular eruption extending downward beneath the adhesive. There was no tendency to bulla formation. Ten per cent aqueous nickel sulfate applied to the back of one hand produced a severe edematous, vesicular reaction, but no bullae. A nickel-containing five-cent piece applied to the back of the other hand showed a two-plus follicular reaction. The patient knew of no occupational or other contact with nickel or its salts.

Interpretation of the patch tests was as follows: There was no reaction of any kind to materials which he had used in his work. The reaction to nickel was interpreted as a dermal and not an epidermal reaction. If the reaction had been epidermal with the same degree of severity, the epidermis would have been lifted up in form of a large bulla. The clinical diagnosis was still considered to be dyshidrosis and exudative neurodermatitis.

Case 2.—Mr. W. McK., aged thirty-two, an aircraft sheet metal worker, was seen on November 27, 1943. He stated that his father had had "eczema." The patient had had dermatitis of the hands and ankles for one year. He presented exudative plaques on the hands, arms, legs and face. Diagnosis was made of exudative neurodermatitis.

On February 17, 1944, he was seen by a second der-

matologist, who made a diagnosis of contact dermatitis. A positive patch test was reported to the dust from the shop which contained particles of aluminum metal that had been treated by a zinc chromate primer.

On June 1, 1944, he was referred to the author for re-evaluation of his condition. He had not been working with the metal treated by the zinc chromate for about three and one-half months, but had been working in oil into which steel is dipped after Parkerizing. He stated that, after working in the oil for two weeks, he had developed boils. He presented dermatitis of the dorsal surfaces of the hands and a furuncle on the back of each hand. There were also vesicular plaques on the sides of the hands. Diagnosis was made of furunculosis and dyshidrosis. Patch tests were made, with the following results: Oil, with which he had been working—negative; aluminum filings which had been treated with zinc chromate—erythema, edema and vesiculation, but no bulla formation. The positive reaction to the filings was considered to be a dermal rather than an epidermal reaction. The diagnosis was still considered to be dyshidrosis and not true contact dermatitis.

The following case is included for contrast, since the clinical picture is identical and there was a history of exposure to chrome compounds, although the patch test was probably negative:

Case 3.—Miss E. S., aged twenty, was referred for evaluation of an eruption. She had been employed in the making of blueprints. The developer, a solution of potassium bichromate, was made up by the patient without measurement of the crystals or water, so that it was of a distinctly orange color. Comparison with a 1.0 per cent solution showed it to be darker, so that it was at least somewhat stronger than a solution recommended for patch testing. She worked without gloves and occasionally got her fingers into the solution. Two weeks before being seen, she had developed dermatitis, starting with a few "pimples" on her arms. The eruption spread rapidly until, when seen, it had involved the arms, face and thighs. It appeared in form of exudative plaques with abundant serous crusting. Diagnosis was made of exudative neurodermatitis (nummular eczema), with impetigo a second choice, because of the thickness of the crusts. Patch tests were made, with the following results: blueprint paper—negative; potassium bichromate solution, prepared by the patient, distinctly orange in color—slightly positive in the form of non-vesicular, diffuse dermatitis, of the type caused by primary irritants rather than the vesicular type seen in hypersensitive individuals. The eruption yielded promptly to treatment for neurodermatitis.

On June 3, 1944, she was again seen with plaques of large vesicles on the arms. She had had a recurrence of the eruption, had applied White's five per cent crude coal tar ointment and had exposed the areas to the sun. The large vesicles had followed this exposure. They were interpreted as having resulted from photosensitization by the crude coal tar. Their occurrence is interesting in that persons with this variety of dermatitis never show macroscopic vesicles as part of the eruption, except on the thickened skin of the hands and feet, but it is evident that their skin can produce vesicles on thin skin under the proper stimulus. She was patch-tested to a nickel-containing five-cent piece and to a potassium bichromate paper which had caused real contact dermatitis in another patient (Case 5). Both tests were negative. It was concluded, therefore, that exposure to the potassium bichromate in all probability had played no role in production of her dermatitis, either primarily or secondarily.

Dermatitis from Nickel and Chromium

It is well known that nickel and chromium produce cutaneous eruptions. According to Schwartz and Tulipan[12], in the refining process of nickel, "nickel refiners' itch" is frequent, a papular eruption about the follicles, especially in a hot and humid atmosphere. Bulmer and Mackenzie[3] blamed the heat and moisture rather than the metal. Lain[8] called attention to eczema produced by nickel in white gold spectacle frames. Fox[4] reported eczema from the same and also from a nickel wrist watch. Others have reported eczema following contact with white gold wrist watches and garter clasps. Becker and Obermayer[1] illustrated the case of a woman who had vesicular dermatitis of the areas touched by the white gold frame and bows of her glasses. Application of a nickel-containing five-cent piece produced a plaque studded with fine vesicles. The eruption was interpreted as due to epidermal hypersensitivity. The following case is illustrative, and emphasizes the influence of heat and moisture in causation or aggravation of the dermatitis.

Case 4.—Miss F. T., an office worker, aged forty, stated that, for six years, she had noted an eruption in the flexures of the elbows during hot weather. She also stated that white metal irritated her skin. She had never had dermatitis from poison ivy. Examination showed an erythematous, papular eruption on the antecubital spaces and a papular eruption on the front and back of the thighs beneath her garter clasps. In an endeavor to protect her skin from the white metal of the clasps, she had covered them with cloth. Diagnosis was made of dermatitis from metal and patch test was carried out with a nickel-containing five-cent piece. There was erythema in sixteen hours and a day later the area was edematous and studded with vesicles. Decision was not made as to whether the reaction was predominantly epidermal or dermal, but the lack of vesicles in the original eruption suggested that the hypersensitiveness may have been dermal.

The location of patches of dermatitis on the antecubital spaces is difficult to explain, but the oc-

currence of the eruption at this site only in hot weather recalls the statement of Bulmer and Mackenzie[3] that heat and moisture are important in production of nickel refiners' itch.

Chromic acid and chromates have been responsible for more cases of occupational dermatitis than have nickel compounds. According to Schwartz and Tulipan[12] workers in the manufacture of chrome compounds and those using the same in tanning, photographic and lithographic work develop ulceration and perforation of the nasal septum and ulcers on the hands. Blueprint developers are exposed to dilute solutions of potassium bichromate. The following case is representative of eczema from potassium bichromate:

Case 5.—Mr. H. F., aged fifty-three, was referred for evaluation of dermatitis of the hands. He had worked at a rotoprint company for nineteen months as a maintenance man, during which time he had handled a red paper occasionally. After nine months he noted dermatitis of the fingers, which was relieved by treatment. The condition recurred four weeks before being seen, following the handling of the red paper. He presented vesicular dermatitis of the hands and arms, especially on the right. Diagnosis was made of dermatitis caused by an external irritant. He was tested to rotogravure prints of various colors and to the red paper, which was more of an orange red color. The only positive reaction was a definitely vesicular reaction to the red paper. Inquiry revealed that the paper was coated with potassium bichromate. Diagnosis was made of eczema due to hypersensitiveness to a chrome compound.

The most recent article on zinc chromate primer used in the airplane industry is an excellent presentation by Hall[6], who determined that 65 per cent of all occupational dermatitis in airplane plants was produced by this material. There were, however, two varieties of dermatitis, one caused by plastics in the primer, the other caused by the zinc chromate pigment itself. In dermatitis due to plastics, the eyelids were always involved, a characteristic of most dermatitis due to external irritation, then the sides and upper two-thirds of the neck, cubital fossae, hands, wrists and fingers in decreasing frequency. Plastics are well-known epidermal sensitizers. In dermatitis due to zinc chromate pigment only, as verified by patch tests to the substance, the lesions were papular or in form of plaques simulating nummular eczema. The sites involved were the radial and flexor aspects of the wrists, dorsal aspect of the proximal portions of the thumb, the volar and ulnar aspects of the forearms, the dorsal aspects of the hands and fingers and, occasionally, the ankles. Fifteen per cent of patients reacting to the primer showed positive tests to both the resins and the zinc chromate pigment. Hall stated: "It is interesting to note that the clinical picture presented by the patients of this group was exactly what one would expect by superimposing one of the dermatitis types described on the other." In a personal discussion of the problem with Hall, he stated that positive tests to the resins appeared more promptly than did those to the zinc chromate. This delay in reaction to the latter may have represented the time necessary for penetration to the dermis.

Discussion

The foregoing case reports and references to the literature have illustrated (1) eczematous dermatitis produced by nickel or chrome compounds and (2) eruptions identical with or resembling exudative neurodermatitis and dyshidrosis, with reported positive patch tests to nickel or chrome. The author and his colleagues have stated[2] that positive patch tests have not been seen in the latter conditions. How, then, are we going to reconcile these apparently conflicting findings? The answer seems to lie, first, in the fact, demonstrated by the author and his co-workers and others, that patients with exudative neurodermatitis and dyshidrosis do show, in a varying percentage of cases, positive dermal tests and, second, that the reported positive patch tests in these disorders differ from the ordinary positive patch tests. Sulzberger's[13] distinction of the two types has already been mentioned. The initial reaction is one of erythema and pronounced edema, both of which features are characteristics of dermal reactions. In mild reactions, the site is predominantly about the orifices, which suggests penetration into them. This phase is followed by vesiculation, much as severe dermal edema in urticaria and other inflammatory conditions of dermal origin may be followed by vesiculation. This concept could be further clarified by assuming that the metals must penetrate to the dermis through the glandular and follicular orifices before the sensitized tissue is encountered. Mackee, Sulzberger, Hermann and Baer[9] and others have demonstrated such penetration. Rothman[11] recently discussed percutaneous absorption. Schwartz and Tulipan[12] mention the possibility that the sweat may act as an electrolyte. When a nickel-containing five-cent piece is removed from the skin, there is often a greenish gray stain, as

though some of the metal and/or its salts had been deposited thereon. The presence of dissimilar metals in the offending metallic object could, with the sweat as an electrolyte, set up an electric current, which might facilitate the penetration of the ions into the orifices.

The author desires, therefore, to present the hypothesis that tests obtained to certain metals such as nickel and chromium may, at times, represent dermal rather than epidermal hypersensitiveness. This assumption could explain the occurrence of such a positive test in persons with functional dermatitis, either dry (as reported by Sulzberger[13]) or exudative neurodermatitis or dyshidrosis. A patient with such a reaction could continue to have functional dermatitis even after he had discontinued contact with the metal in his work. Such a sequence of events leads to much difficulty in interpretation of such conditions in industry, since one of the cardinal features of ordinary occupational dermatitis is its disappearance after the removal of the person from the offending substance.

A second consideration which should be studied is the possibility that sensitization to a metal may precipitate a functional dermatitis. In the etiology of functional diseases, at present we can only state that that ill-defined condition known as "nervous exhaustion" is causative. Tannenholz[14] showed that heat precipitated or aggravated pre-existing nummular eczema and dyshidrosis in one patient. Goldman[5] showed that injection of acetyl choline precipitated or aggravated dyshidrotic eruptions. We should now ask: "Can dermal hypersensitiveness to metals precipitate or aggravate such eruptions?" You are all familiar with the numerous cases of nummular eczema which have appeared during bismuth therapy for syphilis. Have they been produced by sensitization of the dermis to bismuth? These are problems which should be studied.

Another important point which should eventually be answered is the compensibility of such eruptions occurring in industry. Prosser White mentioned a dyshidrotic eruption that continued for some eighteen months, regardless of whether the person was working or not. My Cases 1 and 2 are illustrative of the same course of events. In both instances, the patient's initial dermatitis appeared while at work. In Case 1, the person had not worked with nickel to his knowledge, so that the dermatosis may have had nothing to do with his occupation. In Case 2, however, a positive dermal reaction was obtained to aluminum which had been treated with zinc chromate, to which he had been exposed in his work. There is every reason to believe that constant exposure to such substance in his work would have resulted in at least aggravation of the dermatitis, regardless of whether it had been causative. However, in both Cases 1 and 2, the eruption did not heal when work was changed. In a personal communication, Hall stated that dermatitis had continued for months in several of his patients in the airplane industry, even though contact with the offending material had been avoided and the patients had received dermatological treatment. Further study will be necessary to solve this problem. In case 5, the eruption was eczematoid and a typical vesicular positive patch test was obtained to bichromate paper, proving that the eruption was of occupational origin. After the patient discontinued handling the offending paper, complete relief was obtained.

Summary

1. Both nickel and chromium and their compounds can produce eczematoid dermatitis in individuals working with them. Typical vesicular reactions, which signify epidermal hypersensitiveness, are obtaned on patch-testing.

2. Compounds of both metals have also produced, on patch-testing, dermatitis consisting of erythema, follicular inflammation, dermal edema and subsequent vesiculation.

3. An hypothesis is presented that such reactions may result from dermal hypersensitiveness to the compounds.

4. Dermal hypersensitiveness (never epidermal hypersensitiveness) is seen in patients with functional dermatitis, such as dry neurodermatitis (atopic eczema), exudative neurodermatitis (nummular eczema) and pompholyx (dyshidrosis).

5. The dermatitis which persists after removal of patients from exposure in industry to the offending metallic compound may be on a functional rather than an occupational basis.

6. This possibility could explain the paradoxical behavior of some such eruptions.

7. Such a concept is in accord with findings in previously reported studies on individuals with functional dermatitis.

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Hypoglycemia, Secondary to Islet Cell Adenoma of the Pancreas

With Report of a Case

By Major Luther C. Carpenter, Jr., MC
Grand Rapids, Michigan

THE SUGAR equilibrium is maintained by the counter play, under nervous control, of a number of factors of which the secretions of several glands are most important. Insulin from the islets of Langerhans of the pancreas tends to diminish the amount of blood sugar. Secretions from the medulla of the adrenal gland, from the anterior lobe of the pituitary and from the thyroid all tend to increase it. Despite the antagonistic action of these forces, the amount of blood sugar in normal fasting individuals does not vary greatly but is usually found to be around 100 mg. in 100 c.c. of blood, accepted normal varying from 80 to 120 mgs.

The introduction of insulin as a therapeutic agent was soon followed by dramatic demonstration of the danger which may arise from reducing the amount of blood sugar to far below the normal level. Accordingly, a syndrome of hypoglycemia was recognized. The possibility that the blood sugar might be excessively lowered spontaneously by abnormal activity of the islet tissue of the pancreas was first suggested by Harris in 1924.[6] He reported twelve patients with blood sugar values less than 70 mgs. who had symptoms of hypoglycemia. He concluded these cases probably represented spontaneous hyperinsulinism. In 1927, Wilder[11] reported his now classic case which had all of the symptoms of severe hyperinsulinism and which at exploration had a primary carcinoma of the islands of Langerhans with liver metastases. At autopsy as much as 40 units of insulin were found in 100 gms. of tumor. This was the first proven instance of hypoglycemia being produced by abnormal activity of the islet tissue.

Prior to 1927, twenty cases of adenoma—all discovered at autopsy—were reported in the literature[10] but none of the cases had been studied clinically with reference to the possible presence of hypoglycemia. In 1928, MacClenahan and Norris[8] reported a case of severe hypoglycemia, which at autopsy had an adenoma of the pancreas. This is the first report of the correlation of the hypoglycemic state and adenoma of the pancreas. The following year Howland and his associates[7] of Toronto reported a patient fifty-two years old who gave a six-year history of hypoglycemia. At operation, an encapsulated tumor was found in the body of the pancreas and easily removed. The blood sugar promptly returned to normal. This tumor was originally interpreted as carcinoma microscopically but in view of present knowledge, it was probably an adenoma. From 1929 to 1939, sixty-two cases were reported in which exploration was performed with islet cell tumors being removed in twenty-three instances.[3] Eight other cases showed hypertrophy of the islet tissue.[3] Through June, 1944, 102 cases have now been operated and tumors removed.[3] In 87, a single tumor was discovered, while in fifteen cases more than one tumor was found.[3] Twenty-six, or about 25 per cent, were suspected to be malignant.[3] It is interesting, that while microscopically many cases are considered to be malignant, the findings at operation with no evidence of metastases, and the subsequent clinical course, make it likely that the histologic appearance of malignancy is not necessarily a valid index of malignancy in islet cell tumors. Frantz[3], Duff[2], Brunschwig[1], and Hanno and Banks[5] independently support this statement. Hence, we can see that although the correlation between the clinical history of hypoglycemia and abnormal activity of the islet tissue is of recent years, the increased number of cases discovered in the past five years with the high incidence of suspected malignant change makes it necessary for careful study of cases presenting the hypoglycemic state.

The clinical picture of hypoglycemia secondary to hyperinsulinism is well known. In a mild state, these patients have spells of hunger, weakness, anxiety, pallor, sweating and trembling, the spell appearing in the hunger state. Ingestion of food promptly alleviates all symptoms. In the more severe state, they notice malaise, lassitude, inability to perform mental or physical work, alternate pallor and flushing, sensation of hunger (frequently associated with severe epigastric and left upper quadrant pain), mental confusion resembling alcohol intoxication, epileptoid convulsions and coma.

From the Surgical Service, O'Reilly General Hospital, Springfield, Missouri.

It is interesting that many cases are diagnosed initially as hysterical, while others are considered to be epileptic. While many of these patients are relieved by food, in some instances it is necessary to administer I.V. glucose, as happened in our case. Between attacks, the patient may perform functions normally. In many instances, however, these cases exhibit evidence of impaired mental function.

The diagnosis is made by history and the presence of hypoglycemia determined by laboratory studies. Since there are many causes of hypoglycemia a careful study is necessary. The following organic causes are listed: (1) hypertrophy of the islet tissue without adenoma; (2) islet cell tumors, either adenoma or carcinoma; (3) disturbance of the adrenal gland such as Addison's disease or carcinoma; (4) pituitary lesions, particularly those arising in chromophobe cells which manifest adiposegenital symptoms of hypopituitarism; (5) various diseases of the liver, such as primary carcinoma or types of hepatitis. It is obvious that the above conditions must be considered and a careful study performed to determine the accurate cause.

Whipple's triad for determining the advisability of operating are: (1) attacks of nervous or gastrointestinal disturbances coming on in the fasting state, associated with (2) hypoglycemia below 50 mgs. and (3) relieved by ingestion of glucose.

Operative treatment: The entire pancreas should be exposed and thoroughly examined by direct vision and palpation. According to Maximov and Bloom[9], more islands are found in the tail of the pancreas than elsewhere. This may account for the fact that adenomata are more common in this region although they may be found throughout the gland. If no tumor is found, the inferior margin and the head should be mobilized to permit careful palpation posteriorly. It must be borne in mind that in about 15 per cent of the cases, more than one tumor is found.[3] In one of Graham's[4] cases, symptoms recurred within a few days and at a second operation, an additional tumor was found. Prompt relief of symptoms with immediate return of the blood sugar to normal is the usual course. If return to normal does not result, re-exploration should be strongly considered.

Case Report

The patient, twenty-two years old, a private, was inducted May 24, 1944.

During childhood, following periods of excitement when he would not eat or was not hungry, it was noted that he had spells during which he would be mentally confused and would have difficulty controlling movement of his extremities. Following ingestion of food, he would return to normal. For about six years he was asymptomatic. Approximately four years ago, he had a recurrence when upon awakening one morning, he was confused, had ataxic movements, and was unable to dress. Following breakfast, he immediately regained his normal faculties. These periods of awakening with periods of confusion and ataxic movements occurred two or three times weekly.

TABLE 1. EIGHT-HOUR GLUCOSE TOLERANCE TEST.

Performed August 4, 1944

A.M.		P.M.	
8:15	68	12:15	54
8:45	123	1:15	60
9:15	120	2:15	50
10:15	117	3:15	44
11:15	55	4:15	47

In July, 1941, about 3 P. M., he felt drowsy, lapsed into unconsciousness, and was told he had convulsions and was drooling. He was hospitalized and told his blood sugar was one-half normal. It was suspected that the patient had a brain tumor, but no treatment was recommended. Subsequently, he worked as a truck driver, and several times while driving he would feel drowsy. He would immediately stop, eat, and be asymptomatic. The morning attacks were prevented by his wife's awakening him and feeding him in bed. He describes his attacks as a feeling of numbness, lightheadedness, blurring vision, and loss of stability, followed by unconsciousness. He is confused about the happenings during attacks. He has noticed that strenuous exercise will precipitate the attacks. By regulating his work, he was asymptomatic for several months prior to entering the Army.

On July 18, 1944, he participated in a 14-mile hike. At 2:30 A. M. he hiked back to camp and then negotiated the obstacle course. He states his legs felt rubbery, and to keep from staggering he walked rapidly. Following breakfast, he felt improved but did not eat at noon or evening. He went to bed about suppertime and because he could not be aroused was admitted to a neuropsychiatric ward about 10:00 P. M. At that time he was dazed, drooling, had convulsions, and shortly became unconscious. He aroused about 2:30 A. M., told the nurse he had a low blood sugar, and lapsed into unconsciousness. The following morning, because it was impossible to arouse him, a blood sugar count was taken and reported as below 25 mgs. He was given intravenous glucose and within a few minutes felt perfectly normal. He was placed on frequent feedings of carbohydrates and was asymptomatic. He was transferred to this hospital on August 1, 1944. Here the only positive finding was persistently low fasting blood sugar, 68 mgs. Glucose tolerance test is shown in Table I. Basal metabolic rate was minus five. X-rays of the skull were negative; all other laboratory studies were normal.

With a diagnosis of islet cell tumor, on August 16, 1944, exploration through a transverse incision was done, 1,000 c.c. of 10 per cent glucose having

been administered intravenously prior to surgery. An encapsulated pinkish-purple tumor about 2 cm. in diameter and firmer than the normal pancreas was found at the junction of the head and body on the anterosuperior surface. This was easily entirely removed. Careful search was then made for additional tumors and none found. The wound was closed without drainage. His postoperative convalescence was uneventful, he being ambulatory the third day. Fasting blood sugar the day after surgery was 118.3. Daily determinations were done and all were within normal limits. Following a three-week furlough, he was transferred to the Reconditioning Battalion where he was able to participate in a full schedule. Fasting blood sugar on September 30 was 119 mgs. The glucose tolerance test was entirely normal. Soldier has had no attacks since surgery in spite of strenuous exercise and fasting.

A discussion of the correlation between hypoglycemia and islet cell adenoma of the pancreas has been given. Although the condition is rare, the discovery of an increasing number of cases emphasizes the importance of keeping this condition in mind when hypoglycemia is diagnosed. Early operation should be performed in suspected cases of hyperinsulinism. A case, illustrating the condition, has been presented.

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MSMS

PARRAN INSTRUCTS HIS OFFICIALS

Surgeon General Parran has sent a letter to the officers of the United States Public Health Service instructing them to be careful when discussing President Truman's message about compulsory health insurance, and the new Wagner, Murray, Dingell Bills. By such action he has indicated his complete uselessness to the profession of Medicine in future. This letter will be published in the February JOURNAL of the Michigan State Medical Society.

Appendicitis

A Statistical Study of the Death Rate in Detroit and at Mount Carmel Mercy Hospital

By W. A. Chipman, M.D.
Detroit, Michigan

Senior Surgeon, Mt. Carmel Mercy and Redford Branch, Detroit Receiving Hospitals



FOR A NUMBER of years it has been apparent that the mortality rate in appendicitis is falling. One frequently hears surgeons of many years' experience state that appendicitis has a fixed mortality rate and that nothing much is being done about it. To prove or disprove this contention, the appendicitis death rate of the city of Detroit has been reviewed from 1915 to 1944, inclusive; and the records of appendicitis mortality at Mount Carmel Mercy Hospital of Detroit have been analyzed.

Through the years, surgeons have come to recognize that in general all persons afflicted with appendicitis can be divided into two groups: those having a somewhat fulminating obstructive type and those having a much slower infectious type. As numerous doctors who do not devote their efforts exclusively to the field of surgery may not be aware of these types, a brief summary is in order.

The obstructive type of appendicitis is, in reality, a form of intestinal obstruction, in which the appendix is the obstructed segment. Thus the symptomatology is that of obstruction ranging from fairly severe to very severe cramp-like pain, often felt in the epigastrium early to be followed by localization. Vomiting is present, and may be violent. The patient complains of feeling very ill, and this is substantiated in his appearance. Tenderness and rigidity are fairly marked in most of these patients. The blood count usually shows more toxic changes in this than in the slower infective form and there is a fairly marked shift to the left (Schilling). The pathology is fairly constant

Dr. Chipman received the B.S. degree from University of Wisconsin; M.D., Harvard, 1921. He is a member of Wayne County and Michigan State Medical Societies and the A.M.A., and a Fellow of the International College of Surgeons.

TABLE I. POPULATION AND DEATH RATE FROM APPENDICITIS IN DETROIT 1915–1944

Year	Population	No. Deaths	Rate per 100,000
1915	678,000	114	16.8
1916	725,000	168	23.2
1917	825,000	177	21.4
1918	900,000	132	14.7
1919	926,000	183	19.8
1920	993,739	205	20.6
1921	942,000	174	18.5
1922	952,000	161	16.9
1923	1,151,000	237	22.6
1924	1,130,000	228	20.2
1925	1,246,000	263	21.1
1926	1,291,700	269	20.8
1927	1,334,500	266	19.9
1928	1,378,900	287	20.8
1929	1,429,200	309	21.6
1930	1,568,662	295	18.8
1931	1,523,600	291	19.1
1932	1,495,400	243	16.2
1933	1,483,300	256	17.2
1934	1,487,400	242	16.3
1935	1,550,000	280	18.1
1936	1,648,000	248	15.1
1937	1,658,000	212	12.8
1938	1,561,000	179	11.5
1939	1,600,000	186	11.6
1940	1,623,452	163	10.0
1941	1,690,000	144	8.5
1942	1,750,000	102	5.8
1943	1,850,000	111	6.0
1944	1,700,000*	112	6.6

*Approximate number in service excluded.

TABLE II. APPENDICITIS CASES—MOUNT CARMEL MERCY HOSPITAL

Year	Admissions Exclusive of Newborn	Appendicitis Cases	Deaths	Per Cent
1939	3825	508	10	1.9
1940	7381	965	6	0.6
1941	10875	1299	14	1.0
1942	15753	1541	5	0.3
1943	14965	1470	7	0.4
1944	14696	1580	8	0.5

since the obstruction is at or near the base of the appendix; distention, vascular thrombosis, ulceration of the mucosa, and perforation are present in this order. Perforation is most frequently at the base. This allows rapid and continuous soiling of the peritoneal cavity with extensive peritonitis, and without surgery, death is almost a certainty. Conservative treatment is never indicated in this type of appendicitis.

The infectious type is more analogous to the description sometimes used; a carbuncle of the intestine. There often is a history of enteritis, frequently mild in type. The somewhat vague abdominal discomfort becomes more localized. Vomiting is seldom violent, frequently nausea alone is present. Examination may reveal a mildly dehydrated patient, especially if the patient is a child, otherwise they do not appear very ill. The abdominal findings are usually localized, but not severe. Rebound tenderness may be present, but only fairly late. Nature has had an opportunity to protect the host. The omentum is wrapped about the appendix, even a localized abscess may be present. Perforation, if present, is more often near the tip where the blood supply is less. If the Ochsner conservative treatment has any place in the care of a patient with appendicitis, this is the type it may further protect until surgery may be more safely instituted. It is the author's opinion that this treatment should be reserved for the very ill patient, usually where concomitant disease is of as much or greater gravity. and delay allows time to correct or minimize the associated disease.

Each year in Detroit, as elsewhere, appendicitis takes its toll. The year 1916 had the highest death rate per 100,000, namely 23.2, falling to 6.6 per 100,000 of population in 1944. It is interesting to note two factors that may well have had an important bearing on this fall. Michigan demanded a year internship in 1922, and all years since then, to obtain a license to practice medicine. This may not have been reflected immediately, but must account for some of the improvement in the statistics by the improved quality of physicians. Following the first World War, and more especially since the early twenties, the American College of Surgeons has been, and continues to be, more active in hospital standardization. Again these efforts may have had some delayed results, but must account for some of the improvement, more especially in the smaller hospitals. In 1935 the mortality rate for the city of Detroit was 18.1, and by 1940 it had dropped to 10.0. It is interesting to note that "prontosil" appeared on the commercial market in 1935, and that "prontosil-album" or sulfanilamide was in

moderate use by 1937, having been recognized and listed in the Council Reports of 1937. These drugs were brought out in Europe under the original trade names of "prontosil," in 1933, "prontosil-soluble" the same year, and "prontosil-album" before 1935. Unfortunately they appeared in this country under slightly modified names, thus the original yellow, virtually insoluble product was seldom used; the red highly soluble "prontosil-soluble" was used both intravenously and in tablet form in 1935. They acted by the liberation of sulfanilamide in the body. In the larger metropolitan hospitals these drugs were being used orally or by intravenous injection during these years, namely from 1935 on. The intraperitoneal use of sulfanilamide, later sulfathiazole, did not become popular until the early forties. Thus the more rapid fall in the death rate seen in 1942, 1943 and 1944 is too closely associated with the widespread use of one of the sulfonamides intraperitoneally to be a mere coincidence. During the years of 1943 and 1944 some experimental work was done on the use of penicillin. The limited supply of this drug through much of this period makes it unlikely that any alteration in statistics would be apparent from its use. These drug effects will be discussed in the concluding paragraphs.

TABLE III. DEATHS FROM APPENDICITIS—MOUNT CARMEL MERCY HOSPITAL

Year	Case No.	Age	Diagnosis
1939	199	30	Acute Ruptured Appendix
	579	12	Acute Ruptured Appendix, Peritonitis
	1256	26	Ruptured Appendix
	1979	51	Ruptured Appendix
	2042	51	Ruptured Appendix
	3009	61	Acute Gangrenous Appendix
	2742	12	Gangrenous Ruptured Appendix
	3109	61	Acute Gangrenous Appendix
	3452	53	Acute Appendicitis, Gastritis
	3467	14	Gangrenous Ruptured Appendix
1940	4167	53	Acute Gangrenous, with perforation
	4962	61	Acute Gangrenous, with perforation
	5372	17	Acute Appendicitis, Peritonitis
	5722	37	Acute Appendicitis, Embolism, Pulm.
	5696	44	Gangrenous Appendix
	7626	35	Acute Appendicitis, Peritonitis
1941	11967	17	Ruptured Appendix
	13233	10	Ruptured Appendix
	13495	53	Ruptured Appendix, Thrombosis, Coronary
	14636	57	Acute Appendicitis, Cholelithiasis
	15246	53	Ruptured Appendix, Abscess, Liver
	15515	48	Acute Appendicitis, Embolism, Pulm.
	15623	50	Ruptured Appendix
	16101	43	Acute Appendicitis, Peritonitis
	17704	49	Acute Appendicitis Embolism, Cerebral
	17593	54	Acute Appendicitis, Herniorrhaphy
	18692	29	Acute Appendicitis, Shock
	19472	47	Acute Appendicitis, Peritonitis
	20415	32	Acute Appendicitis, Nephritis, Acute
	20726	28	Acute Ruptured Appendix
1942	28076	55	Acute Appendicitis, Diverticulitis
	29659	31	Acute Appendicitis, Embolism, Pulm.
	34508	40	Acute Appendicitis, Ileus, Acute
	36623	71	Acute Appendicitis, Obstruction, Intestinal
	38937	36	Acute Appendicitis, Shock
1943	46789	9	RupturedAppendix
	45786	30	Acute Appendicitis, Embolism
	48477	65	Ruptured Appendix
	51629	37	Ruptured Appendix, Peritonitis
	55672	45	Acute Appendicitis, Shock
	58386	40	Acute Suppurative, Embolism, Pulm.
	60525	46	Acute Appendicitis, Pneumonia, L.
1944	65056	32	Acute Appendicitis, Hypertension, Essent.
	66417	66	Ruptured Appendix
	63964	44	Acute Appendicitis, Cardiac
	77689	60	Ruptured Appendix, Pneumonia, L.
	80033	67	Ruptured Appendix
	79823	28	Acute Appendicitis, Anemia, Severe
	83119	8	Ruptured Appendix
	82368	55	Ruptured Appendix

The records from the City of Detroit (Table I) are submitted through the courtesy of Dr. Bruce Douglas, director of the Department of Health of the city of Detroit.

The records from Mount Carmel Mercy Hospital of Detroit (Tables II and III) are submitted through the courtesy of Sister M. Pauline, in charge of the record room at this hospital.

In 1939 seven of the ten deaths were due to

acute suppurative appendicitis with perforation, the remaining three to acute suppurative appendicitis without perforation. None were due to complications somewhat afield from peritonitis, the expected cause of death.

In 1940 one of the six deaths was not associated with peritonitis, death being due to a somewhat remote cause. A relatively young woman, in good health except for the attack of right lower quadrant pain, was operated upon with a diagnosis of subacute appendicitis, substantiated by the pathology report. Cyclopropane, oxygen and ether were used for the anesthetic agents. The operation was not prolonged. The highest temperature was 100 on the day of operation, falling to 99 the following day, and for the two days prior to death the peak temperature was 98.8. She suddenly experienced weakness, vertigo, increasing dyspnea, and cyanosis. Death ensued within a few minutes. The clinical diagnosis was pulmonary embolism complicating appendectomy for subacute appendicitis. No autopsy was obtained, but the findings justified such diagnosis. This case has been given more space, perhaps, than it justifies, because each of the following cases listed as pulmonary embolism followed a very similar pattern.

In 1941, of the fourteen deaths, three were diagnosed as pulmonary embolism complicating the operation, differing only in the fact that all three died in the second post-operative week. In another patient the primary operation was for cholecystitis with cholelithiasis, the gall bladder being removed as well as the appendix. Diabetes was present, the blood sugar being above two hundred. Death occurred on the fourteenth postoperative day. Another of these patients was operated on for a bilateral inguinal hernia. As the cecum was present in the right sac, the appendix was removed. In this case the terminal picture was quite rapid, and pulmonary embolism might well have been seriously considered. Another patient died the day of operation. This young woman was in apparent good health prior to the attack of right lower quadrant pain. The operation was not prolonged. It was done under ether anesthesia, but during its course she went into shock. The pulse was 160 and of poor quality. From this shock, the cause of which was not determined, she did not recover, expiring later that day. The pathology was acute appendicitis. Finally, in the deaths for 1941 that were due to complications, is that of a young man who had, at operation, a subacutely inflamed appendix. He died eleven days later of acute hemorrhagic nephritis. Sulfonamide drugs were not used in this patient, thus could not have been causative.

The group for 1942 represents a complicating factor causing or at least being present, in each death. The first was a 55-year-old male with diverticula of the ascending colon, one of which might have perforated prior to operation; suppurative involvement of the appendix; free pus in the right gutter, and not in good general condition. Because of this, the appendix was removed without resection. Sulfathiazole was placed in the abdomen, and drainage was established. Intravenous use of sulfonamides was also undertaken. A fecal fistula developed, urinary retention followed, and death ensued. There were but nine grams of sulfonamide used, and no crystals were present in the urine. It is more likely that this patient died of perforation of a diverticula, and that the sulfonamide drugs did not cause the urinary retention. Another died of pulmonary embolism following the pattern described above. Case 34508 is being reported more in detail as it illustrates the obstructive type quite well. The patient was ill for four hours when operation was undertaken. There had been severe colic, and marked tenderness was present. The appendix was very dilated, filled with pus; thrombosis was fairly widespread in the vascular system of the appendix, and extensive ulceration of the mucosa was present. A fibrinous exudate covered most of the appendix, but no perforation was present. The shift to the left in the blood count was quite apparent, 18 per cent of the white cells being stab forms. This patient was a chronic alcoholic, developing dilerium tremens and dying of that complication. The next death occurred in an elderly patient with intussusception of a carcinomatous mass at the cecal site. The appendix was quite badly damaged by the intussusception, and was removed for that reason. In releasing the cecum, a perforation of the latter developed, which was sutured immediately; however, this may well have added to the existing peritonitis from which the patient died. The final death of the year was quite unusual, a fatal intra-abdominal hemorrhage that resulted from erosion through a thrombosed vein in the mesentery. This was substantiated by autopsy findings.

In 1943 there are two that are listed as pulmonary embolism. These conformed quite closely to the case listed in detail. A third is listed as shock. As this patient had dyspnea, cyanosis, and death fol-

lowing in a short time on the sixth postoperative day, the diagnosis of embolism seems more likely. There was one case where pneumonia became the cause of a fatal outcome. The remarkable feature is that out of the fifty deaths summarized, only two died of this serious complication. Penicillin was not used at this time. For this type of complication, it might well be the difference between recovery and death.

The records for 1944 were not reviewed in detail, but the eight cases might be divided into four with serious complications other than local, and four dying of peritonitis. One of the four that died of other complications, namely pneumonia, also had a ruptured appendix. Two had serious vascular disease, while one had a profound anemia.

One feature must be immediately apparent in reviewing these records. Other than in 1939, nearly half of the deaths were due to complications that might well occur in any operation. The use of sulfonamides was extensive in all but the first of these six years. The choice of drug was either sulfathiazole, or sulfanilamide. Apparently both drugs were accompanied with good results, as a far greater number lived after rupture of the appendix than those that died. Sulfanilamide is accompanied by cyanosis in the first twenty-four to thirty-six hours quite frequently, especially if there is fairly active peritonitis. This seemingly increases its rate of absorption. No other complication from its use was found, and this is easily controlled with niacin. Much experimental evidence has accumulated showing that sulfathiazole is not rapidly absorbed, that adhesions are greater after its use. Ideal treatment would seem to indicate the use of sulfanilamide, not to exceed five grams, in all cases where there is peritonitis without visible perforation of the appendix. If perforation is also present, drainage should be used as well, not otherwise. Penicillin should be reserved for the complications. Our experience is too limited to discuss its value, other than in complications of known type susceptible to the drug, as pneumonia. It must be apparent that the use of intravenous fluids such as saline, five or ten per cent glucose either in water or saline, plasma or blood, or the various amino acid preparations would not alone account for the rapid decline in deaths due to appendicitis. Neither would the use of the Miller-Abbott or Wangensteen tube, or the better choice of anesthetic agents account for this rapid drop. They are all of value, all should be available at any time in a general hospital, but sulfa drugs will continue to be needed until something better is developed.

Summary

There has been a remarkable decline in the death rate from appendicitis in the city of Detroit in the past thirty years. The records from Mt. Carmel Mercy Hospital confirm the diminishing mortality over this period. The following reasons may be given:

First, since 1922, internships are compulsory in Michigan.

Second, the active efforts of the American College of Surgeons, in raising medical and hospital standards.

Third, a greater armamentarium of intravenous fluids for sustaining hydration, avoiding shock, and combating complications.

Fourth, a constantly increasing choice of anesthetic agents.

Fifth, the sulfonamide group of drugs, to be used intraperitoneally, orally, or intravenously.

Sixth, the use of penicillin in certain of the complications.

The author wishes to thank Dr. Louis J. Gariepy for his valuable assistance in the preparation of this report.

MSMS

POSITIVE PATCH TESTS

(Continued from Page 69)

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Vasodilators in Peripheral Ocular Angiospasm

Major Leo J. Croll, MC, AUS
Cambridge, Ohio

Chief, Eye, Ear, Nose and Throat Clinic, Fletcher General Hospital, USA



It is only within comparatively recent times that a spasmodic contraction of retinal arterioles has been suspected as a causative factor in temporary or even permanent loss of vision.

There are a number of actual observations on record in which blindness in acute hypertensive states has been shown by ophthalmoscopic examination to be accompanied by complete spastic obliteration of retinal arterioles, which later again become patent, with restoration of vision as the transitory spasm subsided. These observations have been made by Elschnig, Wagenmann, Lagrove; and Loubry observed a patient with acute lead poisoning who became blind when systolic pressure reached 250 mm.—administration of amyl nitrate lowered pressure to 170 mm., the vision returning an hour later. Amaurosis reoccurred only to disappear as the blood pressure gradually fell to normal the following day.

Carpenter, in 1938, described a case of complete spasm of retinal arterioles, watched an arteriole every few moments suddenly shoot full of blood up to its division, to be followed immediately by another and then another, the phenomena going on rapidly for over two hours and being still apparent but at longer intervals in two weeks' time. There have been many reported ophthalmoscopic observations of spasmodic contractions of retinal arterioles, coming on suddenly, appearing and disappearing in different parts of the fundus, and vision being affected accordingly.

By the term capillary vessels is meant all the endothelial tubing which lies between arterioles on the one hand and the small veins on the other. The blood in the capillaries is separated from the tissue fluid by only a single layer of endothelial cells. Krogh has shown that the branching Rouget cells, outside the endothelium, regulate the caliber of the capillaries. The retinal capillaries are devoid of a true muscular coat, and are narrowed by contraction of Rouget cells. Under normal conditions, the capillary walls permit the passage of (1) water, (2) dissolved gases, (3) crystalloids in either direction and is impermeable to the larger aggregates such as colloids, blood cells and plasma proteins.

Increased permeability of capillary wall manifests itself, not by permitting the freer passage of substances which normally traverse it, but by allowing the passage of aggregates which are too large to permeate the normal capillary wall.

In a personal communication, I. H. Page, M.D., states:

> "The tone of the capillaries is probably controlled largely by humoral factors such as pituitrin, sex hormones, carbon dioxide, etc., but the filling with blood is probably more directly controlled by the arterioles and metarterioles. If they are widely dilated, the capillaries fill well with blood and vice versa. There is a second mechanism which also controls the infusion of the capillary bed and there is the opening up and closing of arteriovenous shunts. This probably is a more important mechanism than has been generally recognized. The filling also depends on the caliber of the venous system. This seems to be particularly true during spinal anesthesia. So, you see, there are really a host of factors which determine capillary perfusion."

Volhard, in discussing edema, states:

> "Normal endothelial cells of small vessels are able to hinder filtration and osmosis and by their own vital function accomplish a normal interchange of fluids. Sick endothelial cells allow salts and albumin to pass through from the blood stream into the tissues, but are unable to absorb these materials from the tissues."

This is apparently his explanation of edema. The endothelial cells may become diseased due to some organic or inorganic condition causing malnutrition or inflammation of the vessels. The endothelial cells are most sensitive to ischemia, which occurs when there is spasm or contraction of the arterioles, the lumen of the vessel is narrowed to such an extent that sufficient blood cannot pass through. If spasm lasts a long time the cells dependent on the arterioles for nourishment may die. Predisposed to ischemia are vessels with arteriosclerotic changes, that is, arteries with a swollen intima, and a thickened elastic membrane.

Major Croll received his M.D. degree from the University of Michigan, 1925. He holds a Certificate of the American Board of Ophthalmology and was a staff member of Grace Hospital, Detroit, before going into the Armed Forces.

W. F. Duggan and F. C. Cordes, quoting Ricker's theory, state that the mechanism of both hypertension and inflammatory conditions is a neurovascular defect. Bacteria or other stimuli first set up a vasoconstriction of all terminal vascular segments. The capillaries rapidly become fatigued and relax, as following an overdose of adrenalin. Then a dilatation of the capillaries results, associated with a sustained contraction of the arterioles, which causes a slowing of the capillary blood flow. Then, the capillaries become more permeable, possibly due to anoxemia or to the opening up of stomata between the endothelial cells. This, Ricker has called prestasis, peristasis, and stasis, depending upon the degree of increased capillary permeability.

Inasmuch as the retinal blood vessels are end-vessels, they are subject to the same diseases as the peripheral vascular circulation. The association of retinal angiospasm with Raynaud's disease is mentioned by Duke-Elder. Raynaud's disease is a vasomotor neurosis, characterized by three stages: (1) local syncope, (2) asphyxia, (3) eventual gangrene affecting usually the extremities. An associated spastic condition of the retina is rare. Allen and Brown (1932) noted one case in 147 subjects. There is, however, a considerable number of cases in the literature. Most of the retinal conditions have been transient and have completely cleared up, but occasionally a milky retina with vision reduced to light perception has been reported as by Wagener and Gipner in 1927 and Anderson and Gray, 1937.

Of late, there has been a great deal more interest in peripheral vascular disease, and with the newer method of investigations, as the pressor tests, more data will be available for interpretation of the association of retinal spasm with peripheral vascular disease. The internist and the opthalmologist should work together, and in studies of peripheral vascular disease a complete eye examination is indicated.

The peripheral vascular circulation may indicate a labile vasomotor system in response to various stimuli, especially, emotion, cold, certain drugs, nicotine, caffein, by showing signs of spasm of the peripheral vessels with resulting stasis in the minute vessels. Peripheral vascular disease is manifested by:

1. Coldness and parasthesias of hands and feet.
2. Hands and feet blanching in cold weather.
3. Flushing of the hands and feet in dependent position.
4. Pallor of hands and feet in elevated position.
5. Temperature of the skin:
   (a) Normal should not be a variation of more than 7.2° F. to 10.8° F. between extremities and abdomen. Temperature lower indicates deficient blood supply.
   (b) Blocking tibial nerve (2 per cent procaine) thus causing relaxation of arterial walls and so increase of temperature.
      (1) In normal—rise of 3.6° F.
      (2) In angiospasm—rise is greater, even up to 11:1° F.
      (3) In smoking—drop of peripheral temperature up to 6.7° F. to 9° F.
6. Capillary microscopy:
   (a) In angiospasm—the visible capillaries decrease by 30 per cent to 40 per cent.
   (b) Relaxation of peripheral spasm—more capillary loops are visible.
7. Cold pressor test (more fully described elsewhere in this paper).

The etiological factors of peripheral angiospasm causing increased capillary permeability and tissue anoxemia are multiple and varied. Among some of the causes enumerated by W. F. Duggan, and F. C. Cordes, and S. R. Gifford are: (1) toxins, (2) viruses, (3) foci of infection, (4) allergy, (5) insufficient oxygen in the blood, (6) histamine, (7) venoms, (8) certain drugs, (9) lack of cevitamic acid, (10) psychosomatic disturbances, (11) nicotine, (12) adrenalin, (13) ovarian insufficiency, (14) cold air, (15) toxemias of pregnancy. It is quite evident that the stimuli causing retinal spasm are numerous; some stimuli like cold or nicotine might act as a precipitating factor or trigger mechanism as seen in tobacco amblyopia and people sensitive to exposure to cold.

Angiospasm has been attributed to an interrupted or continuous flow of vasoconstrictor stimuli due to a chronic psychosomatic disturbance, which is often precipitated by a trigger mechanism like exposure to cold, or acute emotional distress. Thus, angiospasm may be due to two forces, emotional and physical. It is necessary to remove the basis for psychic trauma wherever possible, while carrying out local or general therapy.

The ultimate pathology of arteriolar spasm is:

1. Increased capillary permeability.
2. Perivascular edema and round-cell infiltration, (non-inflammatory).
3. Localized areas of tissue anoxia.

Irrespective of stimuli or etiologic factors, the pathology is essentially the same. The pathologic

changes of this condition are characterized by a complete absence of inflammation. Arterial constriction causes dilatation of capillary walls; due to anoxemia, there is an increase in permeability of the capillary walls, fluid first passing to form edema, then plasma with fibrin, and then formed elements which appear as hemorrhages. The diffuse edema collects under the internal limiting membrane, and if the condition progresses and becomes worse, it may go on to sub-retinal effusion and detachment of the retina. The hemorrhages are capillary and occur mostly in the nerve fiber layer, where they are flame shaped. The macular star is formed by hyaline and fat deposits arranged in groups along the radiating fibers of Henle. Degenerative changes is the end-result if the condition has not received adequate treatment early.

Retinal vessel changes can be divided into two classes:

1. Those occurring in young individuals with normal or low blood pressure and having labile vasomotor system—functional or spastic.
2. Those occurring in middle-aged or elderly individuals with organic retinal changes—arteriosclerotic or organic changes.

The cases which I wish to report are of the functional or spastic type.

The extent and duration of spasm of the retinal arteries will determine the visual loss, from slight blurring to loss of central vision. The most important symptoms the patients complained of were:

1. Sudden loss of vision.
2. Often gives a history of antecedent transitory blurring, with full restoration of vision.
3. Only one eye was involved in my cases; there was no instance of bilateral involvement in a patient.
4. The outstanding ocular symptom is the visual defect which varies according to the area involved from a relative scotoma to sudden complete blindness.

The significant fundus picture was edema manifested by haziness and blurring of the disc margin and edema spreading from the disc to the retina. The edema of the retina was most marked by configuration of macular region fluid under the internal limiting membrane giving a radiate reflex. The most outstanding picture was the circular reflex around the macular area which S. R. Gifford explained as an elevation of internal limiting membrane by edema fluid. The picture of edema of the macular area without the involvement of visable vessels was explained by Hornicker and Bailliart, as due to spasm of the capillaries. Petechial hemorrhages were seen in one case at the end of visible vessels just above the macular area. This case was seen on the third day after an attack of sudden loss of vision, and vision was reduced to light perception and projection.

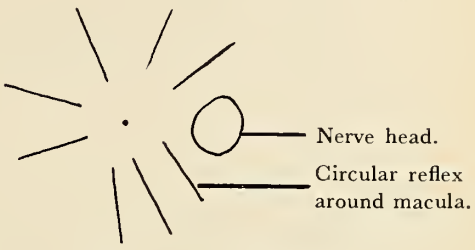


Fig. 1. O. S. Eye. Case 1.

Case 1.—White soldier, twenty-two years old. On September 1, 1944, the soldier states he was well until five days ago when on awakening suddenly noticed he could not see out of his left eye. No history of antecedent eye disease or of previous episodes of blurring. Detailed physical examination was essentially negative. Blood cholesterol: 188 (normal: 140-180). Blood pressure: 112/70. Ophthalmological examination: Vision O.D.V., 20/15 J-1; O.S.V., 5/400 blurred. Conjunctiva of both eyes clear, not congested. Right eye: pupil reacts normally, fundus normal in all respects. Left eye: pupil reacts normally, media clear; optic nerve head nasal edge is blurred and indistinct and covered with exudate from the position of 6:30 to 10:00 o'clock; marked edema of the retina and macula with petechial hemorrhages at ends of small vessels just above the macula. Slight narrowing of the small inferior vessels surrounding the macula, as indicated by a narrowing of light reflexes of the vessels. A decided circular reflex surrounding the macular area, more pronounced between the nerve head and the macula, probably due to fluid under the internal limiting membrane (Fig. 1).

Complete blood count: normal. Kahn, negative. X-ray of chest: negative—no evidence of active parenchymal or pleural disease. X-ray of optic foramina: the right foramen measures 5 mm. in diameter and is quite smooth; the left foramen is slightly oval, measuring 4x5 mm.; the surrounding bony structures are within normal limits on both sides. Detailed search for foci of infection was essentially negative.

September 5.—O.D.V. 20/15 J-1; O.S.V. 10/400.

Patient has been under treatment for four days. The left optic disc is indistinct, hazy, the edges cannot be followed. The circular reflex around the macula is very distinct and the hemorrhages of the minute vessels just above the macula are present.

September 16.—O.D.V. 20/15 J-1; O.S.V. 20/200.

Left optic nerve head more distinct, clearer, edges can be followed. Marked circular reflex from the temporal side of nerve head to 2 mm. beyond the macula area. The hemorrhages have disappeared; no white spots can be seen in the area of the hemorrhages. Edema around the nerve head has decreased, but edema of the retina and macula area, although much less, is still evident by hyperemia and circular light reflex.

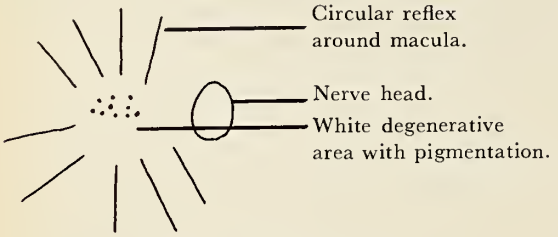


Fig. 2. O. S. Eye. Case 1.

September 20.—O.D.V. 20/15 J-1; O.S.V. 20/100.

Left optic nerve head edges more distinct; circular reflex persists, numerous white hyaline and fatty degeneration spots, sharply outline, bright, shiny around the macula, and also in proximity of retinal vessels just above macula area.

September 26.—No retinopathy, slight edema of the retina and macula persist with circular light reflex well outlined. Edges of the optic nerve head can readily be followed.

October 7.—O.D.V. 20/15 J-1; O.S.V. 20/70 + 2.

Definite improvement, edema subsiding, circular reflex around macula still distinct.

October 16.—O.D.V. 20/15 J-1 + .50 + .25 × 90 = 20/15; O.S.V. 20/50 + .75 + .50 × 85 = 20/50.

Some edema of the macular area persists with circular reflex seen only on temporal area of macula. No retinopathy, vessels around the macula area appear slightly constricted.

October 23.—O.D.V. 20/15 J-1 + .50 + .25 × 90 = 20/15; O.S.V. 20/50 + .75 + .50 × 85 = 20/15.

Improvement is more gradual and slower. Slight edema still evident with circular reflex around the macula still present. It appears that after treatment was started there was marked improvement at first; then, the improvement is more gradual (Fig. 2).

October 30.—O.D.V. 20/15 J-1; O.S.V. 20/50 + .75 + .50 × 80 = 20/40.

Slight edema and circular reflex seen only on the temporal area of the macula. Slight post neuritic atrophy of the nerve head temporal.

November 15.—The edema has completely cleared up as indicated by the absence of the circular light reflex. Just above the macula, there are multiple white degenerative spots with slight pigmentation. Vision has returned to normal and soldier was discharged to duty.

Central field studies of the left eye, when tested with a 1 mm. white test object at one meter distance on 10/3/44, showed a large central absolute scrotoma, and a relative paracentral scotoma, which under therapy gradually became smaller, so that on 11/4/44 absolute and relative scotomata had completely disappeared.

This type of case S. R. Gifford and G. Marquardt have called central angiospastic retinopathy and is manifested by:

1. Edema of retina and macula.
2. Small hemorrhages seen at the ends of visible vessels just above the macula.
3. Slight constriction of several retinal vessels above the macula.
4. Circumscribed macular edema with circular reflex probably due to fluid under internal limiting membrane.

Case 2.—White soldier, thirty-one years old. On June 12, 1944, soldier states he had a sudden loss of vision of the left eye. No pain in or around the eyes. Soldier has never had any antecedent eye diseases. No history of blurring or injury. He reported to the eye clinic four days after his sudden loss of vision. Detailed physical examination was essentially negative. Ophthalmological examination: conjunctiva, clear, pupils react normally. O.D. media clear, fundus normal in all respects; O.S. optic nerve head indistinct; the outline is blurred more so in the nasal area; marked edema of the retina from the nerve head including the macular area. Diagnosis: Acute optic neuritis.

June 19.—O.D.V. 20/70 —2.25 + 3.25 × 103 = 20/20; O.S.V. Light perception and projection, not improved by glasses; —2.00 + 4.00 × 83 = no improvement. Marked edema of the optic nerve; outline cannot be followed on the nasal side. Edema of the retina marked with wrinkling as if retina is on stretch beyond macula and including it. No hemorrhages or exudate seen. Soldier states he can see some better in the left eye since onset of disease.

June 20.—Edema of the nerve head and retina is about the same with wrinkling of the retina. Some suggestion of fullness of veins with stagnation.

June 23.—O.S.V. 20/200; optic neuritis (papillitis), left. Optic nerve head is hyperemic, blurred, indistinct, and hard to differentiate from remainder of retina on the nasal side. There is some nerve swelling, slightly less than 2 diopters, edema has spread from the disc to the retina and is now a neuroretinitis. There is some fullness of the veins, the macula has edema around it but no star-shaped figure as yet. Edema of the area between the nerve head and the macula giving a radiate arrangement probably due to fluid under the internal limiting membrane of the retina, beginning appearance of macula fan.

July 11.—Vision on admission in left eye was only L.P. and now vision is 20/200. Nerve head on the nasal side is better outlined; the edge can readily be followed. Some radiating lines can still be seen around the macula.

July 17.—O.D.V. 20/70 —2.25 + 3.25 × 103 = 20/20; O.S.V. 20/200 —2.00 + 4.00 × 83 = 20/25.

The outline of the nerve head is distinct; however, slight edema persists around the macula. The edema is subsiding with marked improvement in vision.

July 25.—Vision with proper correction is normal in each eye. Some radiating from the nerve head and

around the macula persists, indicating that all the fluid has not been absorbed.

August 12.—No circular reflex present as seen earlier in the condition. The edema has completely subsided.

Electrocardiograph is normal. Kahn was negative. Urinalysis was negative. White blood count: 11,600 on admission which gradually came down to 8,000. X-ray of optic foramina report on June 19, 1944: the right optic foramen is normal in size and contour; it measures 4x6 mm.; the left optic foramen seems to be considerably decreased in size, measuring approximately 2x4 mm.; it is smooth in contour, but the adjacent bony structure shows slight irregularity in density as compared with the right side. X-ray of chest report on June 19, 1944: negative. X-ray of sinuses report on June 19, 1944: The right maxillary antrum is very slightly hazy as compared with the left, but this is not sufficient for a definite diagnosis of pathology. The remaining sinuses including the ethmoids seem clear.

Etiological factors were sought for and none were found. He had eye, nose and throat, dental, genito-urinary, medical consultation, x-ray of the chest and of the sinuses which were negative. However, x-ray of the left optic foramina was narrowed.

The early development of edema of nerve fibers with blurring of margins of disc and extension of edema into adjacent retina as often seen in acute optic neuritis is a reversible change as the regression to normal state follows after anoxemia has ended, if the condition has not persisted too long. The case particularly illustrates the good effect of early treatment with vasodilators.

Case 3.—White soldier, twenty-five years old. At the age of twelve years, soldier states, his left eye was injured and he could always see better out of his right eye. Soldier also states he has had numerous episodes of blurring of both eyes, but more marked in the right, which usually cleared up within twenty-four to seventy-two hours. He was inducted on May 5, 1944, and episodes of blurring have been more numerous; then, suddenly the right eye became blurred and remained that way until about August 10, 1944. The patient was seen on August 24, 1944, and was admitted to the hospital. Detailed physical examination was essentially negative. Blood pressure: 110/70.

August 24.—O.D.V. 10/200 blurred $+.75+.50\times 85$=no improvement; O.S.V. 20/100 —1.00—.25×180 = 20/20.

Conjunctiva clear, pupil reacts normally. Left eye: in the upper nasal quadrant, posterior capsular cataract, traumatic; fundus normal in all respects. Right eye: media clear, marked edema of the macular area which is surrounded by a definite circular reflex; in the region of the macula is a circular area, hyperemic, reddened area —probably due to thrombosis because of repeated spasms of the terminal arterioles in the region of the macula. Optic nerve head shows normal color, contour, and level (Fig. 3).

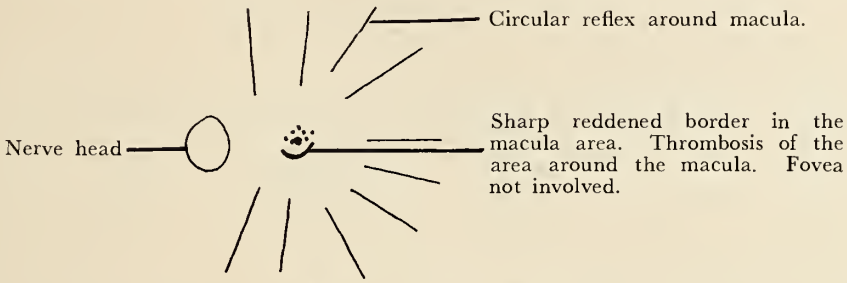


Fig. 3. O. D. Eye. Case 3.

Kahn: negative. Urinalysis: negative. C.B.C.: normal. X-ray of chest: negative. X-ray of both optic foramina: the foramen measures 4 mm. in diameter on both sides and is symmetrical with normal surrounding bony structure. Detailed search for foci of infection was essentially negative.

September 3.—O.D.V. $20/100+.75+.50\times 85=20/100$; O.S.V. $20/100+-1.00-.25\times 180=20/20$.

Marked edema of the macula with circular reflex clearly outlined. The macula area has a semicircular area of redness sharply outlined.

September 20.—O.D.V. $20/70-1+.75+.50\times 85=20/70-1$; O.S.V. $20/100+-1.00-.25\times 180=20/20$.

Right eye: circular reflex around the macula persists, edema fluid. In the area of the macula is the same half moon appearing area sharply outlined with reddened borders.

October 23.—O.D.V. $20/50+.75+.50\times 85=20/40-2$; U.S.V. $20/100-1.00-.25\times 180=20/20.+1$.

Although vision is improved, probably due to improved capillary circulation, circular light reflex persists. The right optic head shows normal color, contour, and level.

October 31.—O.D.V. $20/50+.75+.50\times 85=20/40+$; O.S.V. $20/100-1.00-.25\times 180=20/20$.

It was hard to make out any constriction of visible retinal vessels (Fig. 4).

This patient's history and fundus picture would suggest repeated spasms of the terminal arterioles in the region of the macula which eventually caused a thrombosis of the smaller vessels; however, the fovea was not involved and the patient recovered excellent vision.

The central visual field of the right eye studied with a 1 mm. white test object at 1 meter distance, showed a paracentral scotoma extending into the macular area,

corresponding to the lesion. There was mild concentric peripheral contraction of the right visual field. The left eye reveals normal peripheral and central fields. On 10/31/44 the right eye showed a very small relative paracentral scotoma and this persisted even at the time of his discharge.

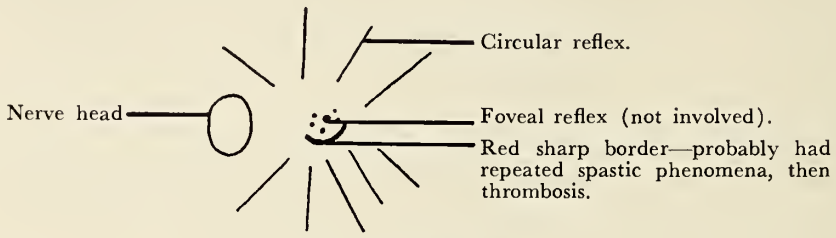


Fig. 4. O. D. Eye. Case 3.

November 15.—O.D.V. 20/40 + .75 + .50 × 85 = 20/30 +; O.S.V. 20/100 — 1.00 — .25 × 180 = 20/20.

The edema has subsided; the circular light reflex around the macula has completely disappeared. However, the thrombosois in the macular area has persisted.

Case 4.—White soldier, twenty-two years old. Soldier states when he was seventeen years of age, he had repeated attacks of blurring of the right eye over a period of three months. When he consulted an eye physician in 1938, he had marked reduction of vision in the right eye. At no time did he have pain or discomfort in either eye. He was inducted in November, 1942, and on August 28, 1944, soldier complained of persistent blurring of the right eye for the past three weeks, and stated he believed he had lost nearly all his vision in the right eye. The left eye has always had normal vision.

Blood cholesterol: 215 (normal 140-180). Blood pressure: 115/80. X-ray: Both optic foramina measure 5 mm. in diameter and are symmetrical in appearance with no evidence of abnormality on either side. X-ray of chest: negative. Kahn: negative. Urinalysis: negative. Right eye showed a concentric contraction of the peripheral field and a large central absolute scotoma which did not improve during therapy.

O.D.V. Light projection and perception; O.S.V. 20/20. J-1. Media clear, fundus normal in all respects.

Right eye: long persistent hyaloid membrane, large area of choroiditis about 2 disc diameters temporally from the disc, exudative, with small central area in the macula grayish and slightly elevated. Around the macula is a distinctive circular reflex indicative of edema. There is slight constriction of superior and inferior macular vessels. There were also several preretinal hemorrhages, and several new blood vessels were growing into the old organized hemorrhages.

Diagnosis:

1. Periphlebitis retina because of recurring hemorrhages in vitreous with preretinal bands of connective tissue.

2. Choroditis, acute, severe, exudative, right. Exacerbation of old chronic central choroiditis.

September 27.—O.D.V. L.P. and P.; O.S.V. 20/20 J-1. Right optic nerve head, distinct, normal color, level,

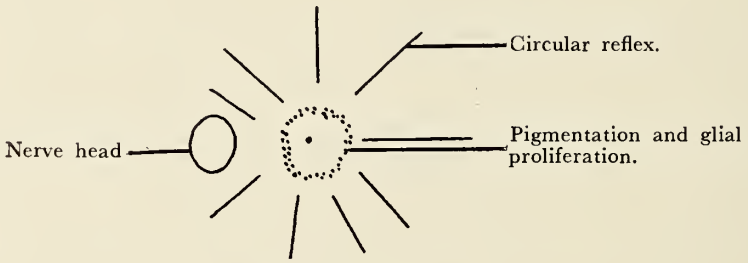


Fig. 5. O. D. Eye. Case 4.

and contour. Large round area of chorioretinitis, central, with marked exudate and edema present.

October 16.—O.D.V. L.P. and P.; O.S.V. 20/20 J-1. Persistent definite circular reflex around old central chorioretinitis. Exudate has disappeared.

October 30.—O.D.V. L.P. and P.; O.S.V. 20/20 J-1 (Fig. 5).

Slight edema persists around old area of chorioretinitis. Because of this, patient has had an old destructive chorioretinitis of the macular area, condition is not reversible and no improvement was apparent except the retinal arteriolar spasm readily subsided under vasodilator therapy.

Case 5.—Twenty-four years, white soldier. About April 1944, the patient awoke and found his vision was blurred in the right eye. He was admitted to an army general hospital where he remained for sixty-three days. He went on a furlough, and the right eye again became blurred, and he was readmitted to another army hospital August 15, 1944.

August 16.—O.D.V. 20/30 J-1 + .75 × 175 = 20/20 +; O.S.V. 20/20 + .50 + .50 × 180 = 20/15.

Right eye: In superior temporal area about 2 disc diameters from the optic nerve head is an area of exudation and surrounding retina is edematous. Proximal to this area is a localized spasm of the arteriole—indicated by marked narrowing of light reflex of the arteriole. One small area of healed choroiditis with pigmentation can be seen just above the area of exudation.

ophthalmoscopic picture of narrowed blood column and thus narrowed light reflex is the picture seen in spasm of retinal vessels. The widened reflex indicates that the blood column is not contributing the greater share of the reflex and the thickened wall is the reflecting surface. This is an important part in differentiating between spasm and organic sclerosis of the retinal vessels.

TABLE I. RESULTS OF SPECIAL EXAMINATION IN ANGIOSPASM

Case	–1– Blood pressure average	–2– Blood pressure after vasodilator therapy	–3– Blood pressure after dipping hand in cold water (cold pressor test)	–4– Pallor of hands and feet (dependent position)	–5– Pallor of hands and feet (elevated position)
1	112/70	110/70–76 days	155/100	++	++
2	108/72	104/66–60 days	145/86	++	++
3	110/68	100/66–83 days	140/100	+++	+++
4	115/76	106/68–77 days	130/100	++	+++
5	106/68	100/68–91 days	130/90	+++	+++

Case	–6– Hands and feet are chronically 1. Bluish-red 2. Moist 3. Parasthesis (continual vaso-spasm)	–7– Hands and feet are reasonably normal in color but subject to digital vaso-spasm (Recurrent acute vaso-spasm)	–8– Hands and feet bluish-red Subject to acute vaso-spasm in response to cold (mixed type vaso-spasm)	–9– Smoking	–10– Degree of capillary spasm
1		+++	+++	++++	++
2		+++	+++	++++	++
3		+++	+++	++++	+++
4		+++	+++	++++	++
5		+++	+++	++++	+++

The Cold Pressor Test was done in the following manner: Blood pressure was taken after one hour rest and the hand was dipped in ice water for one minute and blood pressure taken in thirty seconds and at the end of one minute and every minute for four or five minutes until the blood pressure returned to normal after the hand had been taken from the ice water.

Diagnosis: Choroiditis, acute, severe, exudative, superior, temporal quadrant.

Detailed search for foci of infection was essentially negative. Tuberculin tests from above down were all negative.

O — 1,000,000 O — 10,000 O — 100
O — 100,000 O — 1,000

Frei antigen test: negative. Undulant antigen test: negative.

September 26.—O.D.V. 20/30 +; O.S.V. 20/20.

Exudate has disappeared, but slight edema persists around area of choroiditis.

October 23.—No activity in area of choroiditis. Glial and pigment proliferation. Kahn: negative. Urinalysis: negative. Blood: normal. Blood cholesterol: 187(140-180 normal). X-ray of both optic foramina: the right foramen is upright and oval and measures 3.5 mm. in size, surrounding bony structures within normal limits on both sides. X-ray of chest and sinuses: negative.

This case of acute exudate choroiditis appeared to heal more rapidly under vasodilation than under the older method of treatment without vasodilators. In examining the blood vessels of the fundi, the blood column and not the vessel wall are seen in the normal fundus because of the transparency of the wall of the normal retinal vessel. The light reflex on the vessel is a reflex from vessel wall and from the blood column. Large vessels have wide reflexes and smaller vessels have narrower reflexes. The

It is, of course, only during the early stages of the condition when spasm due to increased vasoconstrictor reactivity is a contributing factor and before organic changes have progressed to the point where they have occluded the vessels that treatment of any sort can be expected to bring about any real benefit.

Outline of treatment given:

1. A psychiatric consultation was obtained and an attempt was made to allay the soldier's fears.
2. Phenobarbital gr. ½ t.i.d.
3. No smoking. This rule was rigidly enforced.
4. Erythrol tetra nitrate (Merck) grs. ½ every four hours was given in an attempt to get a mild gradual prolonged vascular dilatation.
5. Nitro-glycerine gr. 1/100 under the tongue twice daily.
6. Sodium nitrite 100 milligrams (gr. 1½) daily subcutaneous injections.
7. Typhoid vaccine—small doses 10 to 15 million organisms by vein every third day, causing a slight rise in temperature and subsequent vasodilation of peripheral vessels.
8. Calcium gluconate 10 per cent, 10 c.c. were given daily for the first seven days because calcium

is said to decrease the permeability of the capillaries.

9. Atropine sulphate 1 per cent twice daily to keep the eye at rest and for better observation of fundi.

10. Histamine, given in an attempt to obtain more prolonged vasodilation and more rapid improvement. Histamine 1 c.c. ampoule (0.275 mg. of histamine diphosphate) is placed in 250 c.c. of normal saline, and given intravenously very slowly, 16 to 18 drops per minute, so that it will take about four hours to give 250 c.c. If it is given too rapidly, patient will complain of headache and on slowing up the rate of infusion, the headache rapidly disappears. Blood pressure was taken before histamine was administered and taken every half hour while giving it. At first the blood pressure dropped slightly, but at the end of four hours the blood pressure was usually back to normal. All of the patients stated they felt that they could see better; however, there was no demonstrable change in the fundus pictures. Histamine was given twice weekly to the patients for six to eight weeks as deemed necessary.

The entire treatment as outlined was carried out for a minimum of two months and a maximum of three months. Prolonged and constant vasodilation is difficult to obtain and probably not desirable unless it could be well controlled.

Conclusion

The cases reported were all young soldiers in good health so that large doses of vasodilator drugs could be used over a prolonged period with safety. In the cases seen early, excellent results were obtained. Where peripheral ocular angiospasm is suspected in fundus lesions, vasodilator therapy is indicated.

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Leptotrichosis Conjunctivae

By W. E. McGarvey, M.D.
Jackson, Michigan

IN 1898 Doctor Gifford gave the name Parinaud's conjunctivitis to the type of case described originally by Parinaud. As more cases were compiled it was found that they did not conform to any single bacteriological or pathological entity. They were, therefore, grouped under the name Parinaud's syndrome. This term, however, had already been given to a neurological type of paralysis of the conjugate levator ocular muscles and so it was changed to Parinaud's oculo-glandular syndrome.

This general classification includes most of the granulomatous eye lesions with an associated homonymous lymphadenopathy, such as syphilis, and tubercle of the conjunctivae, tularemia, lymphogranuloma venerium, leptotrichosis conjunctivae, necrotic infectious conjunctivitis, sporotrichosis and agricultural conjunctivitis.

With the introduction of Verhoeff's modified Gram stain they are finding more and more of the cases, which formerly would have fallen in the group of unknown etiology, now coming under the leptotrix group. This makes it less necessary to use the general term Parinaud's oculo-glandular syndrome.

Before giving my report of a case of leptotrices conjunctivae, I wish to mention briefly its clinical picture. According to Duke Elder the mode of infection is unknown. Some have reported contacts with animals, especially cats, as in my case. There is an incubation period of five to seven days, followed by unilateral conjunctival and glandular lesions. These may occur simultaneously or at later periods. They are found mostly in children and young adults. The characteristic lesion is one or more small subcutaneous grey opaque areas of necrosis. Papillar elevations are frequently found on the palpebral conjunctiva and less frequently on the bulbar conjunctiva. These may be associated with mushroom-shaped granular elevations which contain the characteristic grey lesions. They do not break down forming ulcers as in tularemia and tuberculosis. The lid is edematous and infiltrated, producing a ptosis. The preauricular gland is swollen and tender. Usually the

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cervical and submaxillary glands eventually become involved. The eye lesions clear up in four to six weeks, while the glands may persist for months. The temperature runs a low grade prolonged course. Increase of eosinophiles have been noted in quite a number of the cases. The patient complains of few symptoms either locally or generally.

Pathologically, these grey lesions show necrosis with infiltration of phagocytes containing the chromatins of the disintegrating cells. Many large and small mononuclear cells, leukocytes and new blood vessels are found. Leptotrices are seen both intra- and extracellular. In the latter case they are found clumped together in large numbers, and are more likely to be found near the necrotic area.

Case Report

M. P., a girl, aged twelve, had measles. Tonsillectomy and adenoidectomy when five years old. Right eye scratched by cat three years ago.

On December 7, 1944, the patient awoke with swelling and tenderness of the right upper lid. Within forty-eight hours the right pre-auricular gland became swollen and tender. A few days later the submaxillary and cervical glands on the same side became involved. The mother stated that she seemed slightly feverish. But aside from the discomfort of the swollen lid and moderate sensitiveness to light she had little complaint. She was seen by me one week after the onset.

Physical examination revealed vision O.D. 6/6-2 O.S. 6/5. Ptosis of right lid with redness, swelling and tenderness. There was an old macula of the right cornea, otherwise normal. Pupils reacted normally and the fundi were normal. The bulbar conjunctiva of the right eye was moderately congested and a group of four follicles were present at about four o'clock midway between the limbus and caruncle. The everted lid showed the palpebral conjunctiva to be covered with papullar elevations more numerous toward the fornix. On about the central third of the tarsal cartilage were two mushroom-shaped granular elevations three to four mm. in diameter. In these were seen small grey areas. The lower lid was normal. The left eyeball and lids were also normal. The right pre-auricular gland was tender and swollen to the size of a hickory nut. The nose and throat showed no pathology. The tonsil fossae were surgically clean. No cervical glands were palpable on the left. The temperature was 99.6°. Smears and cultures taken at this time were negative for organisms. The patient was given sulfathiazole internally and zinc drops in the eye. On December 16, the right submaxillary and anterior cervical glands became swollen and tender. A Kahn and agglutination test for tularemia were negative. A differential blood count showed 33 per cent segmented neutrophiles; 6 per cent eosinophiles; 1 per cent basophiles; 55 per cent lymphocytes; 5 per cent monocytes. (Gifford stressed the increase of eosinophiles.) On January 10, five weeks after the onset, the eosinophile count had dropped to 1 per cent.

A slide was sent to Doctor Verhoeff for examination, and the patient was sent to the Lansing State Laboratories.

On January 12 a letter from Doctor Cummings, Director of Michigan State Laboratories, states:

"Swabs taken from palpebral conjunctiva were inoculated on blood plates for aerobic and anaerobic cultures and into thioglycolate media. Secretions were also injected intraperitoneally into mice and distilled into conjunctiva of a mouse. To date we have not been able to isolate any of the higher bacteria or fungi by any of the methods used."

On the same day a letter was received from Doctor Verhoeff stating that the slide stained with hematoxylin and eosin showed a perfectly typical picture of leptotrices conjunctivae. This was before he had stained it with his modified Gram stain. Later he sent me a slide stained by the Verhoef method showing the organisms beautifully in all parts of the section. They were mostly seen clustered together extracellular. Many were seen, however, in the phagocytes which were noted in all stags of dissolution apparently from the toxicity of the organisms. Some of them appeared to be curved. They were long thread-like about the width of an influenza bacillus and having the clubbing appearance of a diphtheria bacillus. The staining for the organisms apparently must be an exact technique as slides stained in our laboratory as well as one sent to Doctor Heath failed to stain the leptotrices.

The patient ran a low-grade temperature between normal and 102°, the highest, until the twenty-eighth day after which it stayed normal. The palpebral conjunctiva are about normal and glands only slightly palpable at the present writing, two months after the onset.

IT'S THE LAW, DOCTOR

(Continued from Page 46)

certainly would require a physician to treat those diseases."

The trial court submitted to the jury the question whether under the circumstances the defendant had practiced cosmetology or medicine, and instructed the jury as to the law applicable to the two practices. The jury found the defendant guilty of practicing medicine without a license. On appeal, the Supreme Court found that the instructions were proper and that no revisable error had been committed on trial. The conviction was sustained.

Moral—Even a beauty operator cannot make a naturopath into a doctor of medicine.

Traumatic Convulsive Seizures

By Kenneth Stuart, M.D.

Bay City, Michigan



On October 26, 1941, I was struck a severe head blow by a drunken prize fighter at 2:30 a.m. The impact of the blow fractured my nose, the right side of which was lacerated to the length of ¾ inch. Simultaneously my head had fallen through a large window, but fortunately, there were no lacerations of the back of my head or neck. For a short time I lost consciousness. Automatically I was able to take care of myself and I pinned the shoulders of my adversary to the ground, and after that I thought little of it. In the morning my eyes were swollen tightly shut and my headache was moderately severe.

I went to the University Hospital at Ann Arbor two weeks later because of increasingly generalized headache, and pain in the right side of my face, localized from the nose to the ear and from the eye to the mandible. During the three days of examinations and for the following three days, the throbbing facial pain overshadowed the headache. At the end of the third day of examination, Dr. Max Peet had gathered the loose ends of the threads of the examinations together. These are as follows:

1. Physical examination showed (a) new scar on right side of my nose; (b) old fracture of enciform process; (c) old fracture of right tibia above ankle; (d) all nerve reflexes normal; (e) heart and lungs normal; (f) blood pressure 561/95 mm. Hg., which indicated a mild hypertension—of which I never was aware.

2. All chemical analyses, blood, spinal fluid and urine, were normal.

3. X-rays were all normal for all new major fractures; healed tuberculosis lesion in right apex.

4. All other examinations were normal.

5. Dr. Peet's experience told him that the two forces resulting in my head blows caused a rupture of the left meningeal artery in the parietal region of my skull.

I was shocked when he told me the diagnosis was that of a large subdural hematoma and that I should be operated on the next morning. I told him I'd like to go home and consider it for a few days, after he had told me that he had operated on many patients with the same diagnosis successfully as late as two or three months.

I drove my car home to Bay City, and then had my teeth x-rayed by a very competent dentist. Everything was found normal and I was advised to accept Dr. Peet's diagnosis as final. The operations —(1) bilateral trephine for evacuation of a large chronic subdural hematoma, was scheduled for four and one-half days after I had last seen Dr. Peet, (2) the osteoplastic craniotomy for the same purpose was done later that same day as an emergency operation for continued hemorrhage.

However, thirty-six hours after I had last seen Dr. Peet, I was aware of a train of symptoms that I had not experienced previously. Nevertheless, the facial neuralgia, and to a lesser degree the headache, was throbbing with increasing severity. Those new symptoms in order are as follows: (1) a whirling dizziness that increases, then abates; (2) increasing tinnitus; (3) increasing thickening of speech; (4) transitory nausea. One hour later I had the first series of six estimated severe traumatic convulsive seizures. Its onset was sudden and unexpected and the train of symptoms of this particular type of traumatic convulsive seizure was startlingly rapid. The symptoms as they occur in order are as follows:

1. (a) Loss of speech; (b) right radial neuritis involving the thumb, forefinger and middle finger for the most part and sometimes both radial and ulnar nerves. The motor disturbance is evidenced by a jerking, twitching, clonic type of muscular movement. The sensory disturbance is evidenced by an electric shock from the fingers to the elbow, subjectively a sensation of numbness or objectively parasthesia. Figuratively speaking, it is a rapid oscillating current; objectively it would be the picture of a high frequency, short wave length radio tube.

2. My head, eyes and face move to the right in a jerking, twitching manner, and at the same time, there is a numbness of the right side of my head. That includes right side of tongue, buccal membranes, lips and skin—an overstimulation of the

Editor's Note: This paper was prepared by a patient in a mental hospital, and gives his reactions from the inside. We thought it would be interesting to our readers. It is different, and the background makes it most unusual.

facial nerve. At the same time a musty odor appears in my nose as a result of overstimulation of the olfactory nerve. Hard upon it is an ear-splitting loud clap as of thunder in the right ear—overstimulation of the auditory nerve. Stimulation of the salivary glands is always a prominent feature, which gives rise to fear of strangulation. While all this is transpiring my chest feels as if it were being squeezed as in a vise. The O_2 content of the lungs falls rapidly while the CO_2 is rising to the unconscious state. In all seizures never was sleep so desirous or restful. There was complete evacuation of my bladder. At one time, and only once, I had seven mild convulsive seizures, while awake, four months after the operations, with the electric shocks alternating first from the whole right side of my body to my toes, then to the left side. That has been the most fearful and peculiar sensation imaginable to me.

The aura or premonition of traumatic convulsive seizures is very frequent and the pattern is as variable as the convulsive seizure itself. They can be classified as mild, moderate and severe. For one who has them it is impossible for a few seconds up to a minute to determine whether it is the aura or convulsive seizure itself. The mild itching pain over the left motor cortex of the brain follows rapidly an expanding and contracting dizziness and uneasiness, with the surging electrical impulses in my head when the aura is mild. If it is moderate to severe, the right arm is affected. Dr. William Cone of Montreal best described my subjective symptoms as unreality, which, in itself, sums up and totals my subjective symptoms. He said he had seen many cases of severe head injuries with similar symptoms and with thought processes slowed down. Perhaps Dilantin has a small role to play in the symptomatology, according to Dr. Max M. Peet of Ann Arbor, Dr. Wm. Cone of Montreal and Dr. Dorrell G. Dickerson of Los Angeles.

The consensus of opinion is that brain irritation is the cause of traumatic convulsive seizures. Six weeks, in my experience, is the longest period of time that I have had freedom from them. I well remember having had twelve mild traumatic convulsive seizures consecutively after six weeks of freedom from them some two years ago.

It was on December 16, 1941, that I had an estimated series of eight or ten violent traumatic convulsive seizures. They were so severe that both shoulder joints were dislocated and in each arm the tuberosity was fractured from the humerus. It was said that my body described an outside half circle. From the skin to the bones in the regions of the shoulder girdles and upper arm blood hung in huge drapes more pronounced in the auxiliary fossae. So violent were the convulsive seizures with extensive trauma that a marked renal insufficiency with total anuria developed. Chemical analyses revealed: (1) albumenuria—4 plus; (2) N.P.N.—180 mgms. At the end of two weeks my weight was reduced 50 pounds from 180 to 130 pounds. (3) Hemoglobin—30 per cent. Respirations were Cheyne-Stokes in character. I was treated with fifty quarts of glucose in normal saline and sweat baths, and later small frequent blood transfusions. Those who contributed to my welfare and progress at Mercy Hospital, Bay City, Michigan, were Drs. L. A. Ziliak, M. J. Medvezky, Neal R. Moore, W. S. Stinson, J. H. McEwan, R. E. Scrafford, F. P. Husted, Kent Alcorn, Wm. G. Gamble, Jr., Dr. F. H. Lashmet of Petoskey, Michigan, and Dr. Norman Keith of the Mayo Clinic, Rochester, Minnesota.

I lost consciousness December 16, 1941, and regained it January 1, 1942. The renal insufficiency was the result of an overloading of toxins in the blood stream incurred from trauma by the severe traumatic convulsive seizures. The renal insufficiency was diagnosed as acute glomerulonephritis. To this day hyaline casts appear in the urine, and moderate edema of my fingers and legs below the knees is a prominent feature of the picture. Spelling of words, composition of sentences, writing and reading are slow along with a mild speech difficulty. Too, my speech difficulty in a small measure has been taken over in a compensatory manner by writing, which has improved greatly.

Much can be said about self-will and thought control or autohypnosis to stop traumatic convulsive seizures. Sleep relaxes the control and the aura, and the seizures continue periodically. In the waking hours, the seizures are controlled by medication, self-will and thought control, although the aura prevails.

I have had severe traumatic convulsive seizures, except in the one series mentioned, for one and one-half years after the onset, and those with consciousness for the past 2¾ years. The mild seizures have been as short as one minute and as long as twenty minutes. The severe ones are preferable, to say the least. Weather influences traumatic convulsive seizures. I have had numerous convulsive seizures directly following severe electrical storms.

The antispasmodics, such as Dilantin sodium, and sedatives, such as luminal, serve only to allay the convulsive seizures. Dilantin sodium results in dilatation of the pupils of my eyes and hemorrhage of my gums. The latter may result in slow but progressive secondary anemia, if not properly controlled. The end result of my brain injury according to the neurosurgeons was diagnosed as pachymeningitis, scar tissue formation and atrophy in the left motor cortex. Since my accident, I have had fine generalized tremors, uncontrollable for the most part, and twitchings of the right side of my face periodically.

Up to this time, as far as I know, no one has brought forward any worthwhile cure for traumatic convulsive seizures.

MSMS

Correspondence

The following letter is published to give the writers voice in a complaint they have no other way to make.

To the Editor

France, 9 November, 1945

Dear Sir:

There are existing at this time in the European Theatre of Operations, conditions which are the seedlings for planned changes in the future practice of medicine. They have been present all during the actual war and were the stimulus for many thousands of rightful "gripes" by the doctors in the service. Now that the war is over these injustices are still present, and it is high time that they be aired, so as to preserve our present standards of medical practice and thus continue to insure the American people the highest degree of health.

We are writing this letter to you to acquaint you with these conditions which are planned adjuncts to the collaring and slow choking of the American medical profession.

1. Much has already been said and written concerning the surplus of doctors in service, and the hoarding of this surplus by the Military. This unnecessary disproportion was present, but tolerated, during the actual time of combat. At that time there was one doctor per two hundred soldiers. From the available casualty figures published by the Army and Navy, during the entire European and Pacific war, there was available one doctor for every ten soldiers injured. Compare this figure with the civilian figure where one doctor serves one thousand people of all ages and of both sexes. Now with the war over, combat casualties non-existing, and redeployment of the troops "excluding medical officers," this disproportion grows even more alarming and ridiculous. We find ourselves with no work to do sitting idly here, simply political prisoners. Is this not a sufficient contradiction to the plea of "necessity" to arouse in us a suspicion and fear of a sinister plot of the greedy social planners? Do we read socialized medicine in the offing? We are sure we do. We don't like it. We don't want it.

2. A second inciting factor of the present medical situation is the policy of the Army to refrain from inducting into the service those young men who were given a medical and dental education at the expense of the Government. These young men are not being sent overseas as replacements, while doctors with 15 to 24 months overseas service or two to three years total service are being kept here, many to serve in the Army of Occupation. This contradiction to logic, this breech of everything that is right, just and holy is leaving a mark of bitterness in us doctors that even time will not erase. We ask, "Is the Army keeping the older men, those with long overseas service, away from the States to curry favor with the younger man in the hope and play of entwining him in their scheme of socialization.

3. Along the same line, doctors at home, who have never left the States are being discharged with fewer points than many doctors have who are overseas. They are being discharged, and we can't even get home. Again we ask ourselves a question, "Is this justice, or are we making a mistake by expecting justice?"

The result of these injustices is becoming very evident to us who are witnessing these experiences. The doctor has no work, he is loafing, he is losing his initiative, his desire for and interest in medicine. He is developing a mental attitude which if it continues to be nourished by instances as above, will solidify into a bloc, not only willing to accept, but encouraging socialized medicine. This is not an idle dream, this is now an everyday conversation and admission, spoken no longer with hesitancy, nor with shame, and with less and less regrets. The future is not rosy. Is it the desire of the representative leaders of our profession to see as a result of this neglect, an embittered bloc of medical people arise? A bloc so frustrated that the advent of socialized medicine would be a welcome refuge. We think not, and we hope not. Unless something is done immediately, these grave fears will come to pass.

In an effort to avoid this we offer the following suggestions:

1. Let there be adequate medical personnel for American soldiers in each Theatre. No more, no less.

2. Get the surplus of those overseas home immediately. There is an overwhelming surplus. Get those with long overseas service home now. They can't take much more now.

3. Let the ASTP and V-12 doctors earn their Government education by a tour of duty overseas thereby allowing the poor, forgotten, disillusioned, lethargic doctor a chance to return home because he is now filled with ennui such that he doesn't know if he is coming or going!

4. The American Medical Association should pursue its function of protecting the rights of its members. Let us not again see the JOURNAL repeat, without criticism, the exorbitant demands of the Army. It nauseates us who know the true state of affairs, and is an insult to our intelligence.

5. We think, too, that after the cessation of hostilities there ought to be at least a degree of medical autonomy. A representative committee of the profession should have the power to decide how many doctors for the military and how many for the civilian population.

The future of individualistic American medicine is in the balance. You can tip the scales in the right direction. But it must be done now.

A REPRESENTATIVE GROUP OF MEDICAL OFFICERS.

Legislated Health

During the past few months it has been my privilege to attend several county and district meetings throughout the State, in which some of the audiences were made up of physicians only, while others were of doctors and allied professions. One thing particularly attracted my attention, and that was the large attendance at every meeting, and the keen interest displayed in matters pertaining to good medical service for the public, and the thought came to me that with groups such as these the people of this State are safe in placing their medical care in their hands. So it is throughout the entire country, yet there is a well-organized minority who would compel both public and physicians to become socialized under plans introduced from foreign sources. Why compel the American public to submit to plans of this kind? If given incentive and time they will work out their own medical problems. From my own observations the people of the United States are not asking for political medicine and it is certain that the majority of the Doctors of Medicine do not want it. What the people do want is insurance against the cost of catastrophic illness, and this they should have on a purely voluntary basis, without all the compulsion and cramping regulation of bureaucratic control. A cautious person might ask, What does the Government know about running a health insurance organization? and the answer is *Nothing,* because it has never run one. On the other hand, several state medical societies have established medical services which have proved to be economically sound, and not bogged down with excessive administrative costs. Unfortunately none of this valuable experience, nor the actuarial data gained through its application, has been asked for by proponents of pending compulsory health laws, but rather they have gone to small groups, who are known to have reactionary leanings, and who in no wise represent the doctors of this country. Now the President of the United States has fallen under the spell of legislated health. It will take more than laws and a complicated system of taxation to keep this country healthy, and it will also take the co-operation of a willing medical profession.

County societies should take the public in their confidence, the people should be educated locally as well as on a state and national basis. There are various ways of doing this through the use of radio, movies, newsreels, newspaper articles, and public meetings. Of the latter, I do not mean debate or argument, but purely programs of an informative nature.

Your State Society has a committee on National Health Measures which I believe will have already offered constructive service before this letter appears in print. I hope it will receive the active support of every member of the Michigan State Medical Society.

President, Michigan State Medical Society

☆

President's



Page

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Editorial

NEW YEAR

It seems that we have scarcely started one year and its work when a new one is upon us. We have met the problems of past years with varying degrees of success, and have no fear for the future, if the problems to arise will be amenable to solution by regular means. But we have our past experiences, our older heads who have carried on during the war. We now have many of the younger, but war-weary men back with us. They are fitting into the picture with satisfaction to themselves and to the "elder statesmen." Many of the younger men back with us are receiving recognition in offices in the gift of the society, state and county, and in committee positions, and judging from the start they have made we will have a progressive year. That is as it should be, and we welcome them to our conferences, our counsels, and their fair share of the work to be done.

We greet the returning veteran, and assure him of unbounded confidence.

SOCIALIZED MEDICINE

The president says his compulsory health insurance is not socialized medicine. Wagner, Murray and Dingell say their bills are not socialized medicine. What is socialized medicine? Sullivan's Washington letter December 9, 1945, says the plan can become socialized medicine or remain free. "One test will be how and to whom the government pays the money for health insurance. In social security the government pays direct to the beneficiary and he uses it as he freely chooses. If in health insurance the government pays direct to the beneficiary, the beneficiary will be free to choose his own doctor and doctors will have no cause for complaint. But if the government makes the payment direct to the doctors, government would in that case choose the doctors, or set up categories of doctors acceptable to it. It would have control over doctors, their fees, their standards of practice, and their relations with patients. And with control over doctors would go control over patients. By watching this and other tests, Congress, in writing the details of the measure, can achieve the benefits without the dangers which the doctors and others fear."

Making this a real *Insurance* and paying the premiums, in non-profit, medically managed plans would avoid the government control so much feared by the doctors, that is, bureaucratic control of standards, of methods of practice, interference between patient and doctor, limitations, and free choice. It would secure for all those insured the finished first-class service—all patients would have equal rights. None would have special consideration as is now being charged by the social workers who claim we now favor the wealthy patient. There would be no indigents, no one not entitled to all the care and the best care his doctor is capable of giving. Our medically administered voluntary service plans are working adequately for the care now wanted by the people who use them, and more extensive care can be rendered as soon as a need is shown.

Government could use these plans without the charge of Socialized Medicine. All types and classes of persons and groups are using the non-profit voluntary plans and are finding them satisfactory. There are now more than nine hundred thousand persons in Michigan receiving their surgical and allied type of medical care through Michigan Medical Service, and they are happy about it. That includes labor, industry, farmers and professional groups. Even the United States Government has found the voluntary non-profit service plan offers it an escape from a tight spot. Criticism of the Veterans Facility has been severe and not unfounded. The Administration found it difficult to render to the veterans the medical service they had been promised, to which they were entitled according to the law. The Bureau has entered into an agreement with the Michigan Medical Service to provide necessary medical and surgical aid to the veterans in their home towns, and by their home doctors. The government has already recognized the fact of the availability of the voluntary, medically sponsored plan to serve its people. Nothing is too good for our veterans, and in like measure the government can recognize these same plans for the providing of care to its other wards. And done in this way it is

not Socialized Medicine, because there is no civilian control of practice, and no political control involved.

INCOME TAX ON WAGES

Monday, November 19, 1945, President Truman proposed in a message to Congress "a compulsory health insurance." He cites the plea of all the reformers that this is an unhealthy nation, points to the "untold millions" who cannot get adequate medical care, calls attention to the thirty per cent who were examined for the draft and rejected, and proposes a "new economic bill of rights."

He says there are five basic problems:

1. "The first has to do with the number and distribution of doctors and hospitals. One of the most important requirements for adequate health service is professional personnel—doctors, dentists, public health and hospital administrators, nurses, and other experts. It is not enough that we have them in sufficient numbers. They should be located where their services are needed.

2. "The second basic problem is the need for the development of public health services and maternal and child care.

3. "The third basic problem concerns medical research and medical education. There is special need for research on mental diseases and abnormalities. There is no doubt that there are at least two million people in the United States who are mentally ill, and that as many as ten million will probably need hospitalization for mental illness for some period in the course of their lifetime.

4. "The fourth problem has to do with the high cost of individual medical care. The principal reason why people do not receive the care they need is that they cannot afford to pay for it on an individual basis at the time they need it. This is true not only for needy persons, it is also true for a large proportion of normally self-supporting persons. For some persons with very low income or no income at all we now use taxpayer's money in the form of free services, free clinics, and public hospitals. Tax supported, free medical care for needy persons, however, is insufficient in most of our cities and in nearly all of our rural areas.

5. "The fifth problem has to do with loss of earnings when sickness strikes. Sickness not only brings doctor bills, it also cuts off income."

To meet these problems, so enumerated, President Truman recommends that Congress adopt a "comprehensive and modern health program for the nation consisting of five major parts:

"FIRST: CONSTRUCTION OF HOSPITALS AND RELATED FACILITIES.

"SECOND: EXPANSION OF PUBLIC HEALTH, MATERIAL AND CHILD HEALTH SERVICES.

"THIRD: MEDICAL EDUCATION AND RESEARCH.

"FOURTH: PREPAYMENT OF MEDICAL COSTS.

"FIFTH: PROTECTION AGAINST LOSS OF WAGES FROM SICKNESS AND DISABILITY."

That is the program. For the time being we will discuss the fourth proposition! The President says:

"I recommended the solving of the basic problem by distribution of the costs through expansion of our existing compulsory social insurance system. This is not socialized medicine . . . Such a system of prepayment should cover medical, hospital, nursing, and laboratory. It should also cover dental care as fully and for as many of the population as the available professional personnel and the financial resources of the system permit . . . Under the plan I suggest, our people would continue to get medical and hospital service just as they do now—on the basis of their own voluntary decisions and choices. Our doctors and hospitals would continue to deal with disease with the same professional freedom as now . . . I am in favor of the broadest possible coverage for this insurance system. I believe that all persons who work for a living and their dependents should be covered under such an insurance plan."

Wagner, Murray, and Dingell introduced bills (copies now available) to implement this scheme which increases the social security compulsory pay roll tax to eight per cent, four from the employer and four from the worker. Self-employed will pay five per cent. This is all figured on the first $3,600, of gross income. State and local government employes and the government pay 2.5 per cent each.

This could be, and undoubtedly is, simply a presidential backing of the perennial Wagner-Murray-Dingell Bill. By its very terms and wording it is simply an enormously increased INCOME TAX spread on the gross income of everybody, covering earnings up to $3,600.00. The medical services feature is a sop thrown to the multitude who are being led to the slaughter, and the President says himself that such services so provided by the government have been insufficient when provided by tax support. We only need to consider the publicity received by the Veterans Administration before the present enlightened administration took over. That is another large group of people receiving free medical care from tax funds.

We contend this whole so-called "Social Security" is not insurance but is *an income tax, of four per cent from the employe and four per cent from the employer,* taxed on the gross income and taxed against the very class of people who can least afford it. The employer's tax will be passed on to the consumer. This is not an even or equitable tax, but one, and a large one, against the low income portion of the public. The great incomes do not pay in any comparable proportion. Every-

thing above $3,600.00 is exempt. This is just the opposite of the theory of income taxes, which increase for the large incomes.

WAGNER, MURRAY, DINGELL, AND THE VETERAN

Our veteran is a worthy creature. The People and the Congress have been free and just to promise him much in return for his untold and unstinted services. The GI Bill has promised him hospitalization and medical care as well as education, and loans for homes, or to start in business. And every one has applauded. We have all been satisfied. That is, all *except* Wagner, Murray and Dingell. What have they done? They are wholeheartedly attempting to fix things so that the veteran cannot get his hospitalization and medical care unless he pays taxes on his income, and that is on the gross income, too. He will pay four per cent direct and another four per cent will be passed on to him as a consumer. This he will have to pay to get the hospitalization and medical care promised him by a generous government for his sacrifice of years in the dirt and filth and blood of foreign lands.

The Veteran should be the first to rise against the Wagner, Murray, Dingell Bill.

JUSTICE

One of our Michigan doctors, an obstetrician, served three years in the Army, entering France on D-Day, and following through with combat troops. He entered the army as a Captain at age of forty-two. He served through as a Captain. He was returned to the United States, given his separation from the active service, and started his terminal leave on October 1, 1945. On November 9, he was given a promotion to Major, which he must have earned a long time before. But in order to accept that late, afterthought promotion he must sacrifice his mustering out allowance. It costs him $170.00 to accept his promotion.

There is a reason. The Military give a mustering out allowance of $300.00 to all grades up to but not including Major. In this case this officer served and was paid as a Captain, and a promotion should at least have been early enough so that the increased pay would make up the loss. That is only justice.

This individual case is mentioned because there is a very extended and serious criticism of the military for this trick. Many men have had the same thing happen to them, and are naturally complaining. They wish to accept the hard-earned promotion, but do not wish to lose the mustering out pay. That three hundred dollars will help some of these men, who have sacrificed so much, in getting re-established in their practices. Unfortunately this same complaint comes from other branches of the service also.

What's the solution? That is the problem of the Military. However, it would seem that a very simple solution would be to make exemptions in forfeiting the seperation pay of three hundred dollars in the grade of Major, or its equivalent, and make the forfeiture of pay apply only to those whose new rank has been in force for at least four months. At least let the promotion mean something to the recipient, and not be a symbol of the double cross.

NATIONAL HEALTH SERVICE

President Truman suggested in his message to Congress on November 19, 1945, a need and a program for compulsory health insurance. He offers five problems, and a solution in five categories. The one to which we must give the most heed is number four, Prepayment of Medical Costs. The argument covers two and one-half pages, but contains one significant paragraph:

> "Voluntary organizations which provide health services that meet reasonable standards of quality should be entitled to furnish services under the insurance system and be reimbursed for them. Voluntary co-operative organizations concerned with paying doctors, hospitals, or others for health services directly, should be entitled to participate if they can contribute to the efficiency and economy of the system."

The President included the above paragraph which sounds like something the medical men can accept; but there must have been collusion between the President and the socialistic trio, Wagner, Murray, Dingell, because on the same day they reintroduced their earlier bill (S1050 and H.R. 3293) with some deletions and the addition of several pages. The new bill, (H.R. 4730 and S. 1606) is in two titles. The first covers grants in aid to states of twenty-five to fifty per cent for Public Health Services, control of venereal diseases, maternal and child health services, making permanent and for all the present EMIC, and crippled children; medical care of needy persons.

Title two is prepaid personal health service benefits with no mention at any place of tax or premiums.

These bills could not have just happened. They were prepared and introduced with a purpose. They did not propose to allow the above-quoted paragraph to have much effect. The bill reads: Sec. 203 c, "The Surgeon General is hereby authorized and directed . . to negotiate . . . with private persons or groups of persons and with combinations thereof to utilize their services and facilities, and to pay fair, reasonable and equitable compensation for such services. . . ." This sounds as if by stretching it might include co-operative groups, but the context seems to refer to group practice as we understand such groups.

Compensation is authorized on the basis of fee for service, as a per capita basis on a salary basis, or on a combination as the Surgeon General may approve in each area as the majority of the general and family practitioners . . . shall elect. "PROVIDED that the Surgeon General may also make payments by another system . . . and nothing in this section shall prohibit the Surgeon General from negotiating agreements or co-operative working arrangements to utilize inclusive service of hospitals and their staffs and/or attending staffs, or entering into contracts for such inclusive services." This last clause gives authority for the government rendering services through salaried staff groups.

The President was specific as to free choice of physicians and patients, but Section 205 b, reads: "Every individual entitled to receive general medical . . . benefit shall be permitted to select from among those designated in subsection a (those physicians participating)." This is free choice from a limited group. Limits are also placed on the amount or kind of service obtainable by those eligible under the plan. A specialist may not be called except under certain conditions. There is also a limit on the use of hospitals. Paragraph j of this same section reads, "the Surgeon General may prescribe maximum limits to the number of potential beneficiaries for whom a practitioner or group of practitioners may undertake to furnish general medical . . . care."

One of the Washington Business letters on November 24 predicted that this bill or something similar will be enacted in 1946. Mr. Altmeyer, Chairman of the Social Security Board, told the Presidents and other officers of State Medical Societies in Chicago, December 2, 1945: "There is one sure way for the medical profession to make sure that what it doesn't want doesn't happen, even by inadvertance; that is to participate in planning the program." The President's group proposed a plan. This must be integrated soon if it is to be considered by Congress.

COMPREHENSIVE MEDICAL CARE

If Congress, when considering the President's compulsory Health Insurance, will divide the whole problem into its necessary components, and will provide for adequate health service for the people who cannot provide for themselves, the program need not be much more expensive in its total aspect than the present so-called "Inadequate methods." Many of our states have successful voluntary non-profit medical service plans which, by some reasonable and feasible enlargement, and encouragement, could supply complete medical and surgical care. Those who are in the well-to-do, or higher salaried, groups could carry their insurance as they do now, by self-insurance, or by insurance certificates; others could pay their premiums as far as they can afford, and when a calamity in the form of catastrophic disease comes along, they would, as now, become wards of government tax funds.

The non-income, or meager income group would always be wards of government. To those who are the responsibility of government the Medical Service certificates could be furnished by the proper government agency. The patients would then get the best medical care it is possible to give, for the patients would all come under one category in the eyes of the attending physician. He would render the same fine care he gives to all his patients, for they would be the same group. The doctor would be in competition with all other doctors the same as now. That stimulates a doctor to do his best. His pride and his reputation are at stake with every patient, and he will do his best. That may not be the case when he is called upon by a relief agency to care for a certain patient at cost or less. These patients under this proposed plan would not be relief patients—they would be just the same as any other, and paying their full cost.

There is only one principle involved in this utopian plan to make all patients full pay, and

equal responsibility. That is for the government to recognize that doctors can work under voluntary prepayment plans, and do it much better than under compulsion, or bureaucratic control. The British Beveridge Plan recognized that certain voluntary societies were doing a good job, and should be retained.

VANISHING DISEASES?

We have been contemplating some remarks about diphtheria and its increasing difficulty of recognition. We have believed there was a generation of young doctors of medicine who have never seen diphtheria, or very rarely, and were therefore excusable for failing to make a prompt diagnosis. And we still believe that is true. How many young men of medicine would recognize the odor of a diphtheria case? They have not smelled it. How many would recognize nasal diphtheria, or laryngeal, when the throat shows no lesion? The editor, about twenty years ago, had nasal diphtheria for five days before he had a diagnosis, and that was in the years when we were seeing diphtheria.

The past ten years of vital statistics show a great diminution of diphtheria in the United States, 50,462 cases and 4,937 deaths in 1933, and 16,260 cases with 1,273 deaths in 1942. There are now about one-third as many cases and one fourth as many deaths—a very gratifying showing, but it could be better.

The reason for this comment is that these cases, so far as we are able to observe, have been diagnosed late, and have been complicated cases. We have heard of several patients with the laryngeal form, who had tracheotomies, followed by death. We note the tendency in late years to use tracheotomy instead of the O'Dwyer tubes. These tubes are easy of insertion, involve no mutilation, and give quicker and just as free breathing. They used to save many of those patients, too.

ON THE RUN . . .

Three to four ounces of a 10 to 50 per cent solution of molasses is probably the best mixture for a small enema.

• • •

In patients with essential hypertension who died of cerebral hemorrhage, five symptoms were consistently observed: (1) severe occipital and nuchal headache, (2) vertigo or syncope, (3) motor or sensory neurologic disturbances, (4) nosebleeds, (5) retinal hemorrhages in the absence of papilledema or exudate.

—Selected by W. S. Reveno, M.D.

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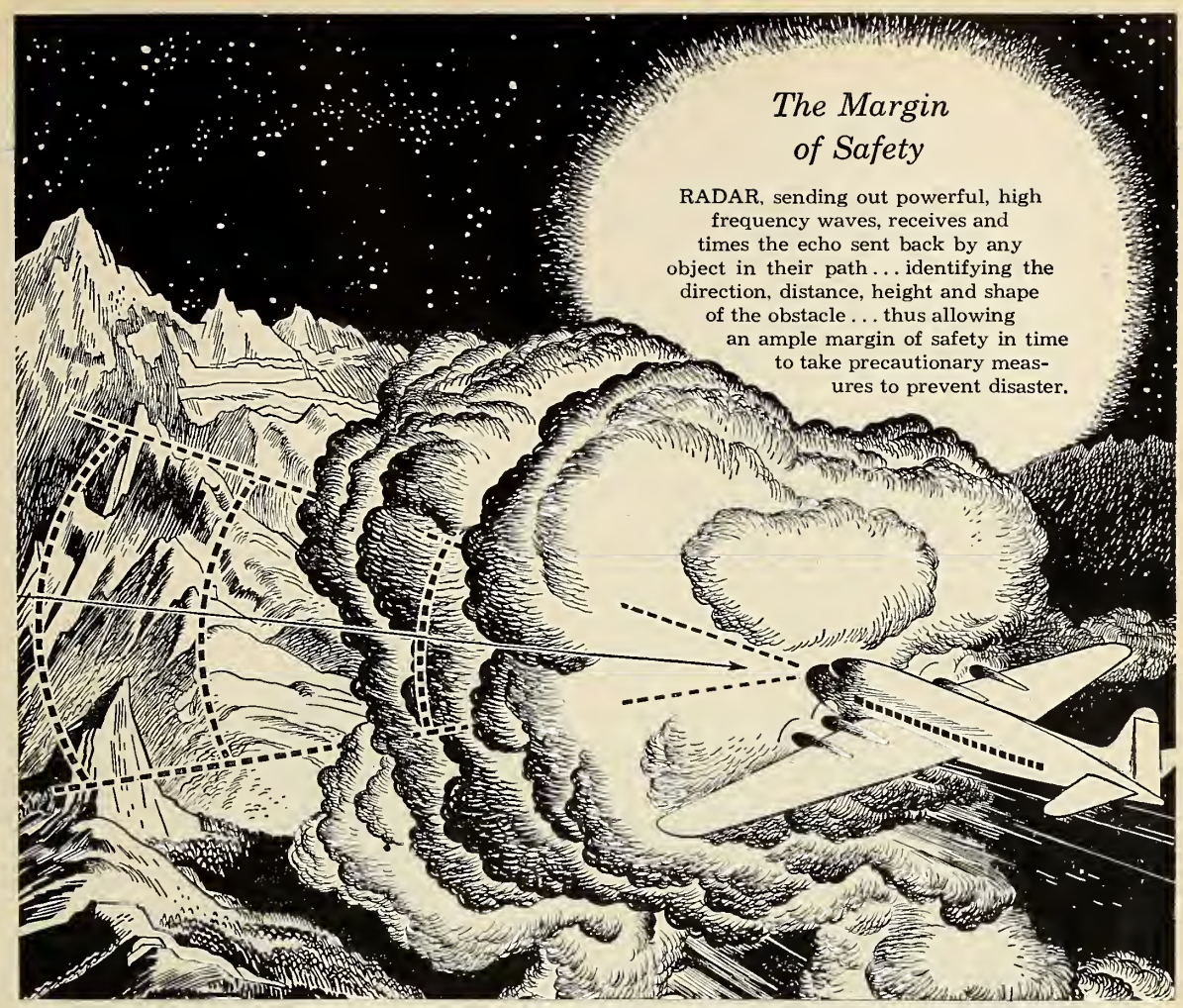
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What's What

The AMA Congress on Medical Education and Licensure will be held at the Palmer House, Chicago, February 11-12, 1946.

* * *

The Chicago Medical Society's Clinical Conference will be held at the Palmer House, Chicago, March 5-6-7-8, 1946.

* * *

Louis J. Hirschman, M.D., Detroit, Michigan, announces the Association with Noeman D. Nigro, M.D., and Martin C. Sharp, M.D., in the practice of Proctology.

* * *

The Michigan State Board of Registration in Medicine recently gave notice that it revoked the medical license of James Franklin Johantgen, M.D., of Talladega, Alabama, and suspended the license granted to Adelard F. Simard, M.D., of Saginaw.

* * *

Michigan contains only 3.2 per cent of the total United States population, yet nearly 6 per cent of all federal taxes are collected within her boundaries. In the fiscal year ended June 30, 1944, Michigan paid a total in federal taxes of $2,370,646,239 or $948 per employed person.

The Van Meter Prize Award of $300 is again being offered by the American Association for the Study of Goiter, for the best essay submitted concerning original work on problems related to the thyroid gland. All manuscripts must be received no later than February 20, 1946. For detailed information write T. C. Davison, M.D., 207 Doctors Bldg., Atlanta 3, Georgia.

* * *

The St. Clair County Medical Society arranged a meeting of doctors of medicine, dentists, and lawyers at Port Huron on December 6, at which Congressman Jesse P. Wolcott was guest speaker. Sixty were in attendance, including R. S. Morrish, M.D., President of the Michigan State Medical Society, who spoke on "Today's Challenge to Medicine and its Answer."

* * *

H.R. 4502, introduced by Congressman Neely of West Virginia, is a bill "to authorize and request the President to undertake to mobilize in some convenient place in the United States an adequate number of the world's outstanding experts, and coordinate and utilize their services in a supreme endeavor to discover means of curing and preventing cancer."

(Continued on Page 102)



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(Continued from Page 98)

The Annual Clinic Day at Mount Carmel Mercy Hospital, Detroit, will be held Wednesday, January 30, 1946, at the Hospital. A full program has been developed for the Clinic Day, to which all members of the Michigan State Medical Society have been invited. Henry L. Smith, M.D., Chief of Staff of Mount Carmel Mercy Hospital, is chairman of arrangements for the Clinic Day.

* * *

L. Fernald Foster, M.D., Bay City and Wm. J. Burns, Lansing, Secretary and Executive Secretary, respectively, of the Michigan State Medical Society, addressed the Michigan League of Home Dailies (Editors of the smaller daily newspapers of Michigan) in Grand Rapids on November 16. A liaison committee representing the newspapers and the medical profession resulted from this conference and discussion of mutual problems.

* * *

Recent Survey made by Canadian Institute of Public Opinion indicates that Canadians are rapidly losing what enthusiasm they may have had for socialization and the nationalization of industry in the British pattern. Asked if workers would be better off if industries were owned and operated by the government, only 18 per cent answered the affirmative as contrasted with 33 per cent in November, 1943.

* * *

The Army's quota of 13,000 doctors to be released to civilian life by December 31 was exceeded six weeks in advance of the deadline, Major General Norman T. Kirk, Surgeon General of the Army, has announced.

From a peak strength of over 45,000 doctors, all but 11,000 will be out of the service by the first of June. In order to do this the Army must continue to follow its policy of expediting the release of doctors as well as other Medical Department personnel in every way possible.

* * *

The peak patient load of Army hospitals in the United States, reached at the end of June 1945, was 318,000, and has been dropping slowly ever since, despite the influx of men from overseas theatres, which was more than compensated for by hospital discharges.

The Medical Department estimated that by January 1, 1946 this total will have declined to about 220,000 patients, and that by June of 1947 there will be only 70,000 men remaining in Army hospitals.

* * *

The most recent of the series of Wagner-Murray-Dingell Bills for socialized health insurance (not "socialized medicine," according to President Truman) are S. 1606 and H.R. 4730, introduced November 19, simultaneously with the presentation of the President's message to Congress on the subject of health legislation.

A new strategy took the bills from the jurisdiction of the Senate Finance Committee and the House Ways and Means Committee, so that the Senate bill is in the lap of the Senate Education and Labor Committee

(Continued on Page 104)



IN THE SHORTENING OF *Convalescence*

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(Continued from Page 102)

headed by Senator Murray (one of the introducers) and the House bill is in the Interstate Commerce Committee.

A digest of the latest W-M-D Bills appears in J.A.M.A. of December 1, 1945, page 963.

* * *

The Kalamazoo Academy of Medicine sponsored a project which proved to be excellent public relations for the medical profession. It authorized a statement for the *Kalamazoo Gazette,* giving the attitude of the Kalamazoo medical profession on the Truman proposal for socialized medicine.

The Kalamazoo Academy of Medicine's story made front-page news. It recommended an alternate plan—the Composite Outline drafted by the Michigan State Medical Society, amended and approved by the Chicago Conference of Presidents on December 2.

* * *

The Daily News of Greenville, Michigan, recently published an excellent editorial on the value of cancer education and the cooperative program of the Michigan State Medical Society and the Michigan Department of Health. In part, this excellent article stated:

"Frankly, it is the aim of *The Daily News* to bring the cancer problem—and what to do about it — to every last person in this county. In so doing your newspaper hopes to contribute something toward reducing suffering and death from cancer causes. We earnestly believe it a worthwhile undertaking."

Our congratulations to L. Earle Davidson, Editor of *The Daily News,* for his appreciation of and tangible aid in the solution of the cancer problem.

* * *

The Jackson County Medical Society has approved the following arrangement of the Chemist Shop of Jackson to aid returning medical veterans to reëstablish their practices:

The drug shop is placing the photograph of returning medical veterans in its show window with a simple statement: "Your Doctor Has Returned." Each picture is given prominence in the window a certain number of times and then is moved back to a larger background in the same window with the photographs of the newest returned doctor being placed in the foreground.

The Chemist Shop also is including the picture of the returned veterans in the middle of their daily newspaper advertisements for a certain number of issues, with every medical veteran of Jackson being treated alike.

The Jackson County Medical Society Ethics Committee has approved this project as merited publicity for medical men who return from the armed forces.

* * *

"American Health at Its Highest" is what Lewis L. Dublin, vice president of the Metropolitan Life Insurance Co., described as the health of people in the United States, in a signed article in the December issue of the *American Magazine.*

Dr. Dublin stated the health of the American people

(Continued on Page 106)



Harvesting influenza virus from chick extraembryonic fluids

Now It Can Be Told

● The prevalence of Influenza during World War I stimulated increased research for better immunizing agents to control this dread disease.

Since 1933 when Smith, Andrewes and Laidlaw isolated a filtrable virus from patients ill with clinical influenza and established the viral etiology of the disease, numerous attempts to develop a prophylactic vaccine have been made.

Burnet, Henle, and Nigg obtained a high concentration of virus in chick extraembryonic fluids; and vaccines made from such fluids were subsequently studied by a large number of investigators. Some degree of efficacy of these vaccine preparations was shown both by antibody response and by protection against experimental infection of test animals and of human beings.

Although for security reasons the fact has not been previously revealed, the Pitman-Moore Laboratories are now proud to list such a vaccine among the prophylactic and therapeutic medicines of which it has supplied large quantities to the armed forces.

The List Includes:

Sulfonamides
Parenteral Solutions
Antipyretics
Typhus Vaccine
Tetanus Toxoid
Influenza Virus Vaccine

PITMAN-MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

Division of Allied Laboratories, Inc., • Indianapolis 6, Indiana

Say you saw it in the Journal of the Michigan State Medical Society

(Continued from Page 104)

was never better but that our knowledge and resources permit of even higher levels of achievement.

Dr. Dublin ranked the states into four groupings of health, taking into account such factors as the general death rate, the infant mortality rate, the death rates of tuberculosis, the rejection rate for selectees, the ratios of physicians in active practice, and of hospital beds to the population. The groups were known as "excellent," "good," "fair," and "poor." Michigan fits into the second group, "good."

The poorest health exists in fourteen states located below the Mason and Dixon line, according to Dr. Dublin.

* * *

The scientific radio presentations of the Michigan State Medical Society and the University of Michigan Department of Postgraduate Medicine are presented every Thursday evening over WJR, Detroit, 11:15 p.m. Topics and speakers include:

"The Pharmacist's Contribution to Public Health" by Dr. Howard B. Lewis, November 8.

"Are Anemias and Other Blood Disorders Inherited?" by Frank Bethell, M.D., November 15.

"Emotional Factors in Illness" by Raymond W. Waggoner, M.D., on November 22.

"Burns" by Kenneth Campbell, M.D., on November 29.

"The Discovery of X-Rays and their Medical Application" by F. J. Hodges, M.D., on December 6.

"X-Rays in the Diagnosis and Management of Pulmonary Tuberculosis" by R. S. MacIntyre, M.D., on December 13.

"X-Rays in the Treatment of Cancer" by Isadore Lampe, M.D., on December 20.

"X-rays in Children's Diseases" by J. F. Holt, M.D., on December 27.

"Diseases of Today" by Martha Westerberg, M.D., on January 3.

"The Common Causes of Diarrhea" by H. M. Pollard, M.D., on January 10.

"The Common Cold" by Richard Lyons, M.D., on January 17.

"Some Complications of Pregnancy" by R. L. Haas, M.D., on January 24.

"The Baby's First Year" by J. L. Wilson, M.D., on January 31.

"The Baby's First Year" (Part II) by E. U. Watson, M.D., on February 6.

* * *

The Branch County Medical Society held a Cancer Teaching Day in Coldwater on January 9, 1946. N. J. Walton, M.D., of Quincy, President, Branch County Medical Society, was in charge of arrangements.

This day's program was a part of the county-wide program in cancer education under way in Branch County this year. Mr. L. Earle Davidson, Publisher of the *Coldwater Reporter,* has underwritten this program, also a similar one in Montcalm County, where he publishes the *Greenville Daily News,* and has asked the Michigan State Medical Society, the Michigan Department of Health, and the local medical, health, and educational groups to prepare and carry out a program designed to reach as many as possible of the residents of these two counties. Literature is distributed to all the homes in each county through the schools and talks arranged for all organizations. Exhibits are placed in every school and community library. Special educational programs are being held for the high school science and health teachers.

(Continued on Page 108)



Save

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LABOR
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For making office or home urine-sugar determinations, use the simple, no heating, easy tablet method provided by

CLINITEST
URINE-SUGAR TEST

For Your Office—Clinitest Laboratory Outfit (No. 2108)
Includes tablets for 180 tests; additional tablets can be purchased as required.

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Includes all essentials for testing in a small, durable, pocket-size case of Tenite plastic.

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Tablet, No Heating Method for Quick Qualitative Detection of Albumin. Bottles of 36 and 100.

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200 MILLIAMPERE MOTOR DRIVEN
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Chicago Medical Society

WHAT—

Annual Clinical Conference

WHEN—

March 5, 6, 7, 8, 1946

WHERE—

Palmer House, Chicago, Illinois

WHY—

- **For Daily scientific programs consisting of half-hour lectures and clinics, beginning at 8:30 A. M. and continuing until 5:00 P. M.**
- **To inspect scientific and technical exhibits**
- **To hear new ideas presented by outstanding clinicians from all sections of the United States**
- **To renew acquaintances**
- **To relax away from your own office**
- **To attend a banquet on Thursday night**

HOW—

By making YOUR reservation through The Chicago Convention Bureau, 33 North LaSalle Street, Chicago 2, Illinois by February 9.

Registration Fee $5.00

(Continued from Page 106)

"Truman Health Plan Arouses a Mighty Storm" is the title of a Chicago *Tribune* article, dated November 21, two days after Mr. Truman sent his message on the Wagner-Murray-Dingell Bills (fourth edition) to Congress. A portion of the *Tribune* article states:

"Many groups, notably medical associations, Catholics who oppose the plan as socialistic, and Christian Scientists who object to being taxed for medical care to which they are opposed, are preparing to wage vigorous warfare on the measure. The principal group favoring the legislation is the CIO, which indorsed it today and urged its immediate enactment.

"The compulsory health insurance plan, it transpired, is chiefly the brain child of Isadore S. Falk, research director of the Social Security Board, and Michael M. Davis, a member of the CIO Political Action Committee and for many years an advocate of socialized medicine."

Speaking of a ten billion tax, the *Tribune* states further:

"The cost of medical care would be paid out of the social security fund, which would be stepped up to 10 billion dollars or more a year.

"The Wagner-Murray-Dingell Bill provides for an increase of the social security pay roll tax (now 2 per cent on payrolls) to 8 per cent—4 per cent paid by employers and 4 per cent by employes on the first $3,600 of pay. This tax, it is estimated, would raise between 7 and 8 billions a year."

"The bill also specifies that there would be limitation on the medical service provided . . . the Surgeon General, who would be the boss of the health insurance system, would be in power to require payment of a fee 'with respect to the first service or with respect to each service in a period of sickness or course of treatment.' The purpose would be to prevent or reduce abuses of entitlement to any such benefit.'"

* * *

Councilor District Meetings

1. Eighth District (W. E. Barstow, M.D., Councilor)—St. Louis, Michigan, October 4, 1945.

2. Fourth District (R. J. Hubbell, M.D., Councilor)—Niles, Michigan, December 13, 1945.

3. Fourteenth District (Dean W. Myers, M.D., Councilor)—Ann Arbor, Michigan, January 10, 1946.

4. Sixth District (R. C. Pochert, M.D., Councilor)—Owosso, Michigan, January 25, 1946.

5. First—Sixteenth Districts (C. E. Umphrey, M.D., and E. R. Witwer, M.D., Councilors)—Detroit, February 4, 1946.

6. Third District (Wilfrid Haughey, M.D., Councilor)—Battle Creek, Michigan, February 5, 1946.

* * *

Medical Service Enabling Acts

The legislature of the state of Alabama amended its non-profit hospital enabling act to permit a non-profit Hospital plan to "include medical and/or surgical and/or obstetrical care or benefits" Approved June 1, 1945.

On October 3, 1945 Arizona enacted a law permitting the incorporation of a non-profit hospital service corporation or medical service corporation or combination of the two. The enactment of these laws brings the number of states with enabling acts for hospital service plans to 34, and for medical service plans to 26. —Public Health Economics, November, 1945.

(Continued on Page 110)

Dietary Protein after Surgery and Other Trauma

apparently must be maintained at a level above normal in order to assure proper wound healing* and at least average resistance against infection.** The feeding of meat, therefore, in adequate amounts, as soon as it can be instituted, appears doubly advantageous: the protein content of meat is high and of highest biologic value; the human digestive tract appears well adapted for handling meat protein.**

*" . . . in a variety of medical and surgical conditions there may occur a considerable depletion of body protein owing to a combination of factors, of which the two most important are a generally diminished protein intake and an enhanced protein catabolism. This situation inhibits wound healing, renders the liver more liable to toxic damage, impedes the regeneration of hemoglobin, prevents the resumption of normal gastrointestinal activity and delays the full return of muscular strength. It is obvious that to meet the situation an adequate supply of proteins and calories must be made available to the body. . . . This implies at least 150 Gm. of protein and 3500 calories, with as much as 500 Gm. of protein daily when trauma has been severe, as in serious burns." (HOFF, H. E.: Physiology, New England J. of Med. 231:492 [Oct. 5] 1944.)

**"Cannon . . . cites the evidence which indicates that diminished protein intake lowers resistance to infectious disease, and corroborates it by his own experiments . . . it seems probable that the small intestine is better adapted for handling protein (especially meat protein) than for other types of food. . . . it is especially well supplied with enzymes which attack protein, and the digestion of meat has been shown to be more complete than that of foods of vegetable origins." (CRANDALL, L. A., Jr.: The Clinical Significance of the Plasma Proteins, Memphis M.J. XIX:147 [Oct.] 1944.)

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES

Say you saw it in the Journal of the Michigan State Medical Society



Man's First Line of Defense Against Winter—a

LONDON FLEECE OVERCOAT

Who cares if Old Man Winter turns on his chilliest blasts? Not the man inside a London Fleece. Wrapped inside its snug protection, he's as snug as a cat by the fireside. And this coat, in spite of its grateful warmth, weighs less per square inch than even a textile expert might guess. You'll scarcely feel its presence on your back. Styled in the distinctive Whaling manner, we think a London Fleece is a real find for the times. How about helping YOU into one? 55.00

WHALING'S

MEN'S WEAR • 617 WOODWARD

(Continued from Page 108)

Wagner Assails Tactics of Health Bill Foes

Washington — Dec. 10, 1945 — Senator Robert F. Wagner, New York Democrat, said that the American Medical Association is dispensing "misleading and inaccurate" information about his health insurance bill.

"The fact is," Wagner said in a broadcast, "that the views of the American Medical Association do not represent the views of many doctors in the United States nor the majority of the American people."

Wagner disputed what he described as a claim of the AMA that his legislation, designed to carry out President Truman's national health insurance plan, sounds like "regimentation" or "dictatorship."—*Detroit Free Press.*

* * *

Parran Hits Critics of Truman's Health Plan

New York — Dec. 12, 1945 — Surgeon General Thomas Parran struck back today at medical profession criticism of President Truman's proposal for compulsory health insurance.

If an effective plan is to be worked out, Parran said in a prepared address, the medical profession "should begin to explore the problem objectively and come forward with solutions, not rejections."

The surgeon general, a physician himself, discussed the President's proposed national health program before the U. S. Conference of Mayors. Compulsory health insurance is one of the program's five points.

Parran observed that physicians had taken the lead in planning for nationwide construction of hospitals and asserted they "must do likewise" in planning for services under the insurance plan.

"The challenge to the professions is to participate fully in developing organizations and methods, whereby efficient, high standard services may be rendered," he said.—Battle Creek *Evening News.*

* * *

New Medical Service Plans

Prepaid Medical service, is now available to the state of Alabama through the Blue Cross plan. Rates are 75 cents a month for the individual, $1.50 for husband and wife, and $2.25 for a family including children up to sixteen years. Maternity benefits may be included in the family contract for a rate of $2.00 per month.

Iowa Medical Service started enrolling on September 1, 1945. Two types of contracts are offered, both on a cash indemnity basis. One is a surgical benefit and the other medical and surgical. This is a service benefit for unmarried subscribers earning under $1,500.00, and for families with total income of less than $2,500.00. Seventy-five per cent of the fee is paid to doctors who are non-participating.

Ohio Medical Indemnity Inc., is a stock insurance company with all the stock held by Ohio physicians. The premium rates will probably be sixty cents a month for an individual and $1.90 a month for an invidual

(Continued on Page 112)



only
one
capsule
once a
month

provides adequate
dosage for
rickets prophylaxis

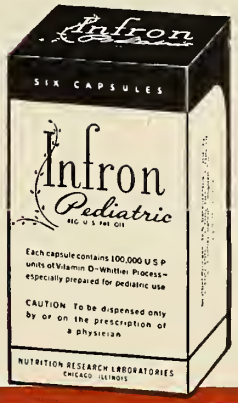
Each capsule of Infron Pediatric contains 100,000 U.S.P. Units of vitamin D—Whittier Process—especially prepared for pediatric use.

Infron Pediatric is readily miscible in the infant's feeding formula, milk, fruit juices, or water, and can also be spread on cereal.

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DETROIT 14 MICHIGAN

(Continued from Page 110)

worker and dependants. Payments will be made to the policy holder, and not to the physician.

Virginia Medical Service is now available to subscribers of Blue Cross plans operating in Virginia. It is a service plan to all within certain income limits. Medical, Surgical and obstetrical care in the hospital are included.

* * *

Mississippi Valley Medical Society 1946 Essay Contest

The Mississippi Valley Medical Society is resuming its annual Essay Contest which has not been held during the war. In 1946 it offers a cash prize of $100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents of the United States. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society to be held at St. Louis, Mo., September 25, 26, 27, 1946, the Society reserving the exclusive right to first publish the essay in its official publication—the *Mississippi Valley Medical Journal* (incorporating the *Radiologic Review*). All contributions shall not exceed 5,000 words, be typewritten in English in manuscript form, submitted in five copies and must be received not later than May 1, 1946.

Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Illinois.

* * *

Venereal Disease Control

A study of the effect of mobilization and the Selective Service blood-testing activities on the age distribution of syphilis cases admitted to public clinics in the District of Columbia was made by the author in an attempt to ascertain and make provisions for the problems of diagnosis and treatment that are arising with the changing conditions of demobilization and reconversion.

The study was based on tabulations of all cases of syphilis admitted to clinics from Jan. 1, 1940 through April 30, 1943, for which the following information was known: race, sex, age, diagnosis, and month and year of admission. There were 26,870 such cases, comprising 1,471 white men, 1,029 white women, 12,045 Negro men, and 12,325 Negro women. The majority of the cases had passed the early stages of the disease. Of the total, only 3,643 were admitted with primary or secondary syphilis.

During the period of the study there was a steady increase in the total number of patients admitted. Changes in the age distributions of all race, sex and diagnostic groups closely followed the patterns which

(Continued on Page (114)



You Deserve It!

Last word in sterilizer beauty and efficiency is this Pelton Model 61-HP . . . Roomy . . . Impressive . . . Finished like the finest motor car . . . All the clever features you've admired, plus some more you've never heard about . . . Topped by the famous 8 x 16 Pelton Surgical Autoclave that sterilizes gloves, fabrics and other materials with 250 degrees of steam under pressure . . . Just what you've always wanted—and deserved . . . Your dealer can accept your order today.

Double Cabinet less Autoclave, $192. With Autoclave as shown, $482. Same plus 2-gal. Water Sterilizer $571.50. Western prices $203, $503 and $579.50 respectively

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THROUGH THESE EXCLUSIVE FEATURES

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- **An inkless, direct-writing recorder.**
- **Completely eliminates all photographic and developing procedures.**
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- **Shockproof. Records are permanent.**
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(Continued from Page 112)

could have been expected from consideration of the changing Selective Service regulations and local control activities. This indicates that analysis of local conditions will enable alert health authorities to predict and prepare for changes in problems of control.

The authors suggest that during the period of demobilization there will be much turnover among the individuals composing the population. The proportion of cases found among young men, which has been very low of recent months, will undoubtedly increase. All these factors indicate an increasing need for venereal disease control activities especially those having to do with case finding. Planning is necessary.—George C. Ruhland, Frederick G. Gillick, and Ben D. Chinn, J. Ven. Dis. Information, Washington, 26:222-229, (Oct.), 1945.

* * *

Medics Step Up

John Public, for whom a big doctor bill often represents a catastrophe, casts a hopeful eye towards the American Medical Association's proposal to sponsor far-reaching "voluntary" prepaid medical plans.

John raised his eyebrows not a little when he heard about the action of AMA's house of delegates Wednesday. He'd read much about AMA's resistance to a current bill to provide Federal health insurance, and he

(Continued on Page 116)

Welcome Home!

To the returning veterans our help is pledged to assist you in every way for prompt, accurate clinical laboratory service.

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All types of diagnostic work done by latest approved methods. Fees reasonable.

OPEN 9 TO 5 DAILY
6-7 EVENINGS
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"FROM A CLINICAL POINT OF VIEW...

*it must be assumed that every patient with chronic infection is anemic."**

● For treating hypochromic anemias, Hemo-genin combines the advantages of Fergon (Ferrous Gluconate Stearns) with the nutritional values of vitamin B complex plus liver concentrate. Because Fergon is rarely associated with gastro-intestinal distress, Hemo-genin may be administered before meals to enhance iron absorption.

Hemo-genin

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FOR HYPOCHROMIC ANEMIAS REQUIRING IRON AND B COMPLEX



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FACTS ABOUT HEMO-GENIN

COMPOSITION: Fergon (Ferrous Gluconate Stearns), synthetic vitamin B complex factors, and liver concentrate. Six capsules daily supply 12 gr. ferrous gluconate and the daily requirement of B vitamins.

NON-IRRITATING to gastro-intestinal mucosa because low degree of ionization makes it virtually non-astringent. May be administered before meals to facilitate maximum absorption.

GREATER iron utilization shown by clinical comparison of ferrous gluconate with other iron salts.†

†J. Clin. Investigation 16:547, 1937.

INDICATED in hypochromic anemias requiring iron and vitamin B complex. Especially valuable when patients do not tolerate other forms of iron.

DOSAGE: Two capsules three times daily, before or after meals.

SUPPLIED in bottles of 100 and 500 capsules.

FURTHER FACTS AND SAMPLES WILL BE GLADLY SENT ON REQUEST

*J.A.M.A. 123:1007, 1943.

TRADE-MARK HEMO-GENIN – REG. U.S. PAT. OFF.

Effective Convenient Economical

THE effectiveness of Mercurochrome has been demonstrated by more than twenty years of extensive clinical use. For professional convenience Mercurochrome is supplied in four forms—Aqueous Solution in Applicator Bottles for the treatment of minor wounds, Surgical Solution for preoperative skin disinfection, Tablets and Powder from which solutions of any desired concentration may readily be prepared.

Mercurochrome

(H. W. & D. brand of merbromin, dibromoxymercurifluorescein-sodium)

is economical because stock solutions may be dispensed quickly and at low cost. Stock solutions keep indefinitely.

Mercurochrome is antiseptic and relatively non-irritating and non-toxic in wounds.

Complete literature will be furnished on request.



HYNSON, WESTCOTT & DUNNING, INC.
BALTIMORE, MARYLAND

(Continued from Page 114)

recognized this as a significant step for the conservative medicos to take.

It isn't that John is thrilled about the idea of Uncle Sam, taking over the medical profession. He is pretty sure the resulting bureaucracy and red tape would be costly to him as a taxpayer, might lower medicine's high professional standards and achievements.

At the same time, he's had one or more doctor bills in his lifetime that staggered him. The indigent's medical care is paid for him, the wealthy person pays without wincing. But when illness struck suddenly, John was called on to pay a bill for which he had little or nothing budgeted and for which he was many months making up.

The "Blue Cross" plan of Michigan Hospital Service and Medical Service, backed by physicians, has been an important forward move. But these pay expenses only for those who go to hospitals.

AMA's newly announced plan would largely answer the essential features of a federally-sponsored plan—without its disadvantages.

The society aims, says a press dispatch, "at promoting the development of medical care plans in large areas of the country now uncovered, and will seek to coordinate such plans, and plans already in operation, in such a way that a subscriber in any part of the country would be able to have his doctor's bill paid no matter where he traveled."

Locally sponsored by individual medical societies, as proposed, it is plain that overhead and operating expense to both doctor and patient would be held to a minimum. There would be no "dictatorship" of a political appointee in Washington, nor would there be compulsion on any person to join if he neither wanted nor needed the service.

AMA has set its goal at close to 100,000,000 members in the prepayment plan.

To John Public, the average citizen, it looks like a sound middle road between his present lack of financial protection and political medicine that might cost more in the long run.—*The Flint Journal,* Dec. 8, 1945.

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INVISIBLE CONTACT LENSES
BY EXPERIENCED TECHNICIANS
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1006 Medical Arts Bldg., Scranton, Pa.
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The Preference is Overwhelming

A comprehensive report published in *Human Fertility*[1] shows an overwhelming preference by experienced clinicians for the "Diaphragm and Jelly" method of conception control.

The report covering 36,955 new cases shows that the diaphragm and jelly method was prescribed for 34,314, or 93%.

On the evidence supplied by competent clinicians we continue to suggest that for the optimum in protection the physician should prescribe the combined use of a vaginal diaphragm and spermatocidal jelly.

When you specify "RAMSES"* a product of highest quality is assured.

Gynecological Division
JULIUS SCHMID, INC.
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1. Human Fertility, 10:25, March, 1945.



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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review as expedient.

ONE HUNDRED YEARS OF GYNECOLOGY. A comprehensive Review of the Specialty During its Greatest Century. By James V. Ricci, A.B., M.D., Clinical Professor of Gynecology and Obstetrics, New York Medical College; Director of Gynecology of the City Hospital and of Columbus Hospital, New York; Attending Gynecologist and Obstetrician, Flower and Fifth Avenue Hospitals; Consultant, Beekman and Downtown Hospitals; Fellow, N. Y. Academy of Medicine, et cetera. Department of Gynecology and Obstetrics of the City Hospital, New York, Philadelphia: The Blakiston Company, 1945. Price $8.50.

Two years ago we had the pleasure of reviewing one of the finest examples of research and constructive writing, Doctor Ricci's Genealogy of Gynecology. We were sincerely impressed with the monumental work and the beautiful book that followed. Now this same author has produced a text on the field of Gynecology during the hundred years from 1800 to 1900. This is not just a historical document, but is a text and reference book, of case reports, of summaries, and of references. There is a considerable chapter on the trends of the nineteenth century, and those pertaining to gynecology. The discovery and introduction of anesthesia is described, and attention called to its use in Gynecology. The Gynecological advances are described in various chapters, one on the Treatment of Ovarian Cysts. Pathology and

(Continued on Page 122)

Uniform Satisfaction

Schieffelin
BENZESTROL
(2, 4-di (p-hydroxyphenyl)-3-ethyl hexane)

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PRESCRIBING OCCUPATIONAL THERAPY, By William Rush Dunton, Jr., M.D., Second Edition. Springfield, Illinois: Charles C. Thomas, Publisher, 1945. Price $2.50.

In order to select and prescribe occupational therapy the physician must know what the therapy is, how it is given and what it will do. If not he must delegate the selection to a physiotherapist. This little book classifies and analyses the various conditions that will be benefited, and the therapy that will apply. Then under general headings like mental disorders, general medicines, orthopedic, surgical, cardiacs the various exercises, tasks, duties or jobs are considered, and their value estimated. The book is stimulating, and thought-producing. Its suggestions are a hint as to what can be done in this field.

STRUCTURE OF THE HUMAN BODY, By Ralph N. Baillie, Ph.D., Assistant Professor of Anatomy, Louisiana State University School of Medicine, New Orleans, and Donald S. Kimmel, Ph.D., Associate Professor of Anatomy, Temple University School of Medicine, Philadelphia. 158 Original illustrations. Philadelphia: J. B. Lippencott Company, 1945. Price $3.00.

This is a small textbook of anatomy and its associations, with nothing to do with disection, but it takes

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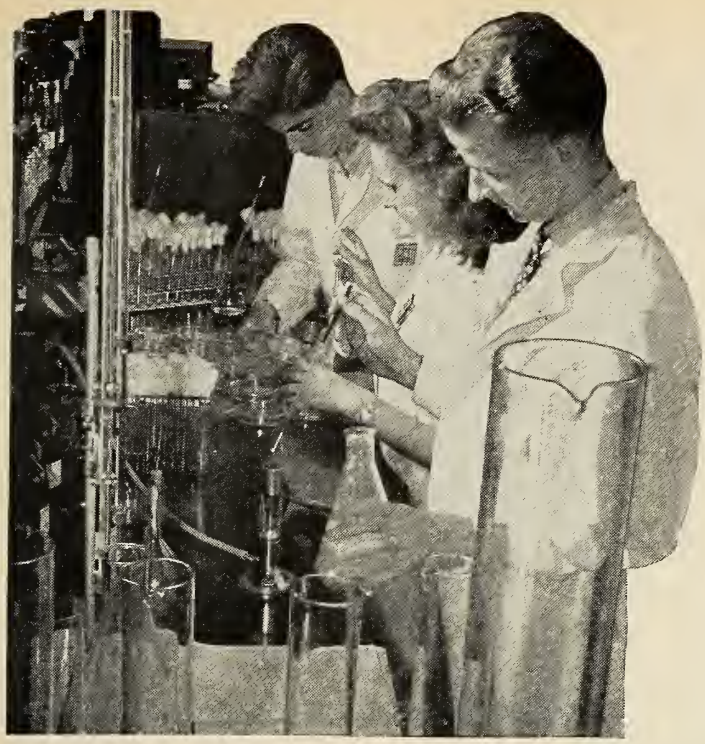
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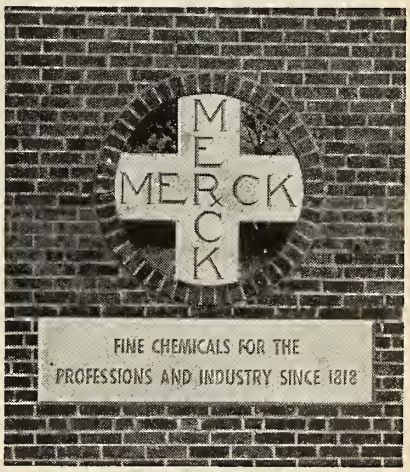
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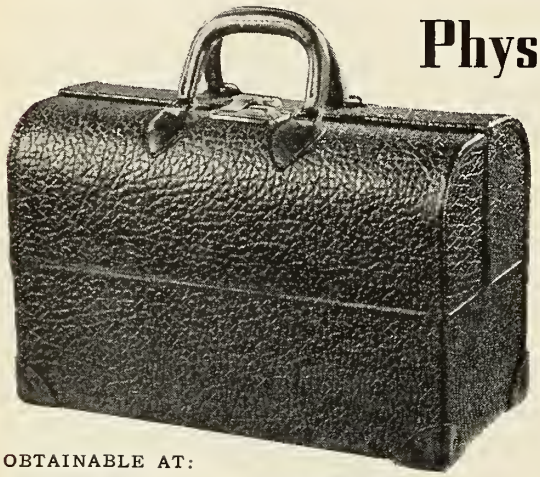
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*Key, J. A. and Conwell, H. E., P. 1215, "The Management of Fractures, Dislocations and Sprains," Mosby, St. Louis, 3rd Ed., 1942.

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(Continued from Page 144)

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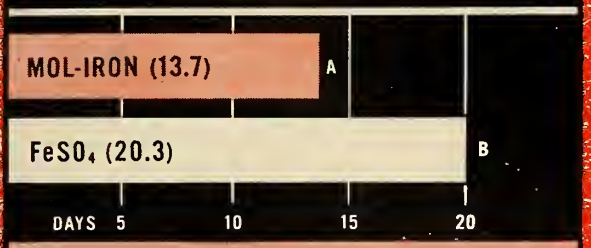
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A NEW AND DEFINITE ADVANCE IN TREATING IRON-DEFICIENCY ANEMIAS

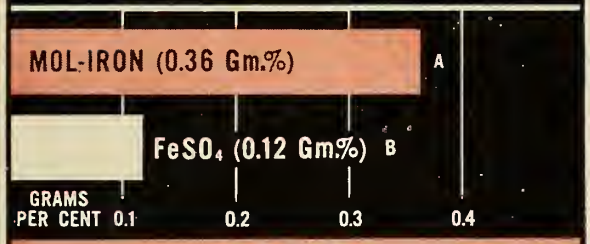
Rapidity of Clinical Response



(A) Completely effective therapeutic response (return to normal blood values) was obtained in an average of 13.7 days of Mol-Iron therapy.

(B) Ferrous sulfate therapy *failed* to produce normal hemoglobin values after an average of 20.3 days.

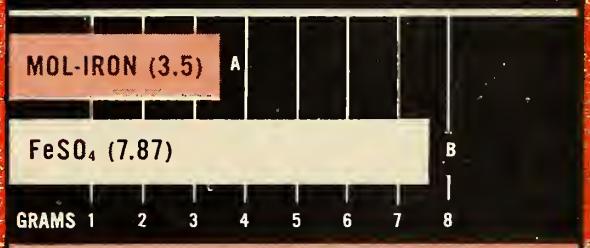
Average Daily Hemoglobin Increase



(A) The group treated with Mol-Iron averaged a daily hemoglobin increase of 2.48 per cent (0.36 Gm. per cent).

(B) The group treated with ferrous sulfate showed an average daily gain of hemoglobin of 0.83 per cent (0.12 Gm. per cent)—a response about one-third as effective.)

Therapeutic Intake of Bivalent Iron



(A) The Mol-Iron treated group received an average total of 3.528 Gms. of bivalent iron to produce the sought for result (return to normal blood values).

(B) While an average ingestion of 7.871 Gms. of bivalent iron failed to achieve an optimal response in the ferrous sulfate treated group.

The charts summarize the results of a controlled study of comparative therapeutic response in post-hemorrhagic and nutritional hypochromic anemias.

The series includes 49 cases treated with Mol-Iron and 21 with exsiccated ferrous sulfate; the results are typical of those observed in treatment of iron-deficiency anemias with White's Mol-Iron.

A specially processed, co-precipitated complex of molybdenum oxide (3 mg.) and ferrous sulfate (195 mg.).

White's MOL-IRON TABLETS

Available clinical evidence indicates that, in hypochromic anemia, the therapeutic response to this highly effective synergistic combination—as compared with equivalent dosage of ferrous sulfate alone—has unusual advantages:

1. NORMAL HEMOGLOBIN VALUES ARE RESTORED MORE RAPIDLY, INCREASES IN THE RATE OF HEMOGLOBIN FORMATION BEING AS GREAT AS 100% OR MORE IN PATIENTS STUDIED.
2. IRON UTILIZATION IS SIMILARLY MORE COMPLETE.
3. GASTRO-INTESTINAL TOLERANCE IS NOTABLY SATISFACTORY—even among patients who have previously shown marked gastro-intestinal reactions following oral administration of other iron preparations.

INDICATED IN:

Hypochromic (iron deficiency) anemias caused by inadequate dietary intake or impaired intestinal absorption of iron; excessive utilization of iron, as in pregnancy and lactation; chronic hemorrhage.

DOSAGE: One or two tablets three times daily after meals.

Available in bottles of 100 and 1000 tablets.

Ethically promoted—not advertised to the laity.

WHITE LABORATORIES, INC.

Pharmaceutical Manufacturers, Newark 7, New Jersey

You and Your Business

WHAT THE PEOPLE THINK ABOUT HEALTH INSURANCE†

This survey, undertaken during June and July, 1944, was conducted by a nationally known impartial agency according to scientific principles assuring the most accurate results. It involved direct questioning of 4,968 persons in all walks of life throughout the state.

The Results

Question.—Do you think we should have some sort of a government-operated medical hospital plan?

The Vote.—

Yes	38.7%
No	42.8%
Don't know	18.5%

Comment.—Most national surveys have shown a considerable majority of the people favoring a governmental health care program. A high percentage of the Michigan population already has obtained non-governmental protection against the costs of sickness, however (see below). Satisfaction with non-governmental protection (which has been widely adopted in this state) evidently accounts for the difference between the Michigan and the national surveys.

Question.—If you were asked to choose, which of these plans for medical-hospital care would you prefer?

The Vote.—

Voluntary pre-payment program sponsored by the medical profession and hospitals	33.7%
Government-controlled program	15.5%
Regular insurance	13.4%
Union-controlled	.9%
Payment for service at time rendered	26.6%
Don't know	9.9%

Comment.—Obviously, the mere fact of offering the people a choice causes wide variations of opinion. Only 63.5% of the people are able to make an immediate choice among types of pre-payment programs—a point indicating the great need of public education in this field. However, of those who do choose amongst types of pre-payment health care programs:

75.5% choose voluntary as against governmental pre-payment plans.
53.0% choose pre-payment plans sponsored by the medical profession and hospitals.

Question.—Do you or any members of your family subscribe to a medical or hospital service plan for which a monthly fee is collected?

The Vote.—

Yes	41.5%
No	56.6%*
Don't know	1.9%

Comment.—Two of every five persons in Michigan already hold protection against the costs of sickness through voluntary (non-governmental) organizations. The number thus protected is increasing rapidly. An additional 163,000 persons have enrolled in the Michigan Blue Cross Plans (Michigan Hospital Service and Michigan Medical Service) since this survey was conducted.

†Highlights of a survey sponsored by the Michigan Health Council, Washington Blvd. Bldg.—Detroit 26, Michigan.

*The individual Doctor of Medicine has the responsibility of helping to lower this percentage by telling all the people of Michigan the advantages of voluntary group medical care coverage contrasted to compulsory, expensive, legislated schemes.

THE FOURTEENTH "FIRST" FOR MICHIGAN

The Michigan plan for furnishing home office medical care to veterans, by use of hometown doctors of medicine, represents "Another First for Michigan," to quote the phrase which has become a byword in medical circles outside this State.

The thirteen other "Firsts" sponsored by the Michigan State Medical Society within recent years include, briefly, Michigan Medical Service; Extra-mural Postgraduate Medical Education Courses in physicians' home communities; Michigan Foundation for Medical and Health Education, Inc.; commercial radio program over WJR every Friday evening at 6:30 p.m.; Annual Industrial Health Conferences; Detroit-Denver Medical Public Relations Conferences, leading to creation of "Conference of Presidents and Other Officers of State Medical Associations"; Development of "Outline" for needed medical legislation benefi-

(Continued on Page 152)

FIFTH IN A SERIES OF CHALLENGES TO MEDICINE'S

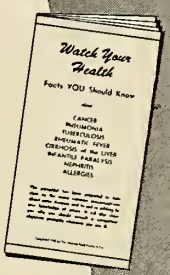
Achievements For Tomorrow



• NEPHRITIS stood fourth in causes of death in 1942*.

This is one disease from which thousands could be saved if people were educated to visit their physicians for periodic checkups, because nephritis gives no warning symptoms in its early stages. A physician's thorough examination and tests would disclose the otherwise unsuspected nephritic condition.

To help in educating the laity in the importance of regular examinations, we have prepared a pamphlet — "Watch Your Health". Nephritis is one of the seven serious diseases explained in simple terms. Copies are available to physicians on request.



* U. S. Summary of Vital Statistics, 1942.

WARREN-TEED

Medicaments of Exacting Quality Since 1920

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS 8, OHIO



Warren-Teed Ethical Pharmaceuticals: capsules, elixirs, ointments, sterilized solutions, syrups, tablets. Write for literature.

FOURTEENTH "FIRST" FOR MICHIGAN

(Continued from Page 150)

cial to the people; Michigan Rheumatic Fever Control Program, including formation of Diagnostic and Consultation Centers covering the State; Medical Veterans' Readjustment Program; Uniform Fee Schedule for Governmental Agencies; Cancer Detection Clinics; Organization of Michigan Health Council; and stimulation for creation of a "National Health Congress."

NO POPULAR VOTE ON COMPULSORY HEALTH INSURANCE

Many persons believe that the subject of compulsory health insurance will be placed before the voters of the country for final decision.

The fact is that any action taken on this important subject will be done by the federal Congress and not by general ballot.

It is anticipated that early hearings will be held in Congress on social security revision, including the Wagner-Murray-Dingell Bill and the Pepper Bill.

MICHIGAN MEDICAL SERVICE

To enable General Motors employes to keep their Michigan Medical Service and Michigan Hospital Service protection and group life insurance during the strike, the corporation opened all personnel offices to accept payments. For those financially unable to make payments, General Motors offered to advance the necessary funds and make deductions from future pay.

Employes were notified of these arrangements by extensive radio and newspaper publicity supplemented by a letter from the corporation mailed to the homes of all concerned.

Through this arrangement several thousand General Motors employes were enabled to continue their Michigan Medical Service and Michigan Hospital Service protection who otherwise would have been forced to let it lapse.

MEDICAL LAW ENFORCEMENT

October 31, 1945, marked another milestone in the case of William A. Kopprasch, pending an appeal which may be made by the attorneys, Joseph Hoffman and Miles.

William A. Kopprasch is a medical doctor of Allegan, Michigan, whose license to practice medicine in the State of Michigan was revoked on June 8, 1945, by the State Board of Registration in Medicine. The revocation was based on the arrest and sentence of William A. Kopprasch for violation of the Federal narcotics law involving the dispensing of narcotics through the mails. Narcotics were mailed to Jack Fisher under date of February 17, 1942, and March 11, 1942. Mr. Fisher was dead at the time the last bottle of narcotics was mailed to him.

Hardships have been encountered in this case, which has lingered in court from June 8, 1943, to October 31, 1945. Dr. Kopprasch was first licensed to practice in Michigan in 1924. From time to time complaints came in, were investigated and settled. After Dr. Kopprasch's license was revoked he continued to practice medicine, with the exception of writing narcotic prescriptions, and he did not advertise as boldly as he had before. He made no attempt to conceal the fact that he was practicing medicine. According to testimony in court he notified his patients that the practice of medicine was just an act of charity on his part, that he could prescribe and diagnose, but that he could not sign his name, that he could not charge any fee but that the patients could leave a specified amount on the desk when they left. One record, that of a birth under date of January 21, 1944, was completely filled out except for the doctor's signature. The birth record was signed by Della Ewers, the child's grandmother, a woman seventy-three years of age and so feeble that she could scarcely hold a glass of water.

Evidence was secured that Dr. Kopprasch was practicing medicine after his license had been revoked and on September 27, 1944, a complaint was issued by a very unwilling prosecutor. It was necessary to postpone the hearing until the election of a new prosecutor. Perle Fouch was elected prosecuting attorney. He was called upon before the election and promised that he would be willing to fight the case if he were elected.

Kopprasch secured as his attorney, Representative Miles, a practicing attorney from Saugatuck whose father is the presiding judge in Allegan County. He was also represented by Joseph Hoffman, son of Congressman Hoffman. Congressman Hoffman wrote suggesting that the prosecution should not continue with the trial. A letter was also sent to the governor's office which was answered by Mr. Schancupp who was then the legal representative for the State Board of Registration in Medicine.

On April 24, 1945, Dr. Kopprasch pleaded guilty in

(Continued on Page 166)

MICHIGAN HOSPITAL-MEDICAL SERVICE RATES

As of January 2, 1946

	Hospital		Surgical	Surgical & Medical
	Semi-Private	Ward		
Individual	$1.00	$ .80	60/90	90
Husband and Wife	2.20	1.80	1.60	2.20
Family	2.40	2.00	2.25	3.25

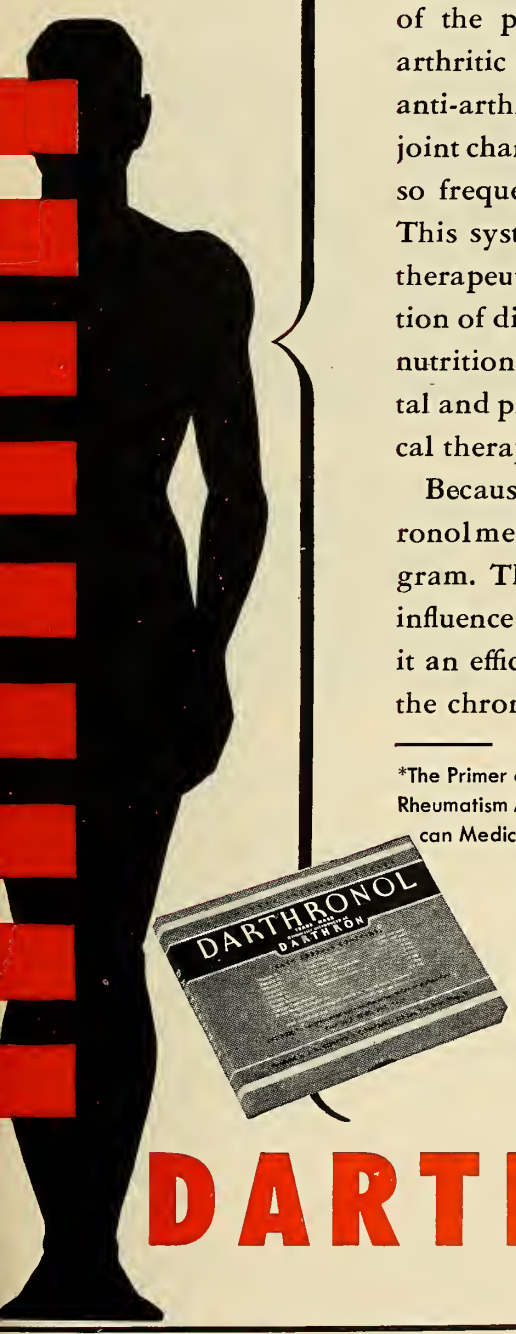
"Rheumatoid arthritis is a systemic disease; the patient must be treated as a whole, rather than have local treatment to his joints alone."*

THIS statement by the American Rheumatism Association Committee is the keynote of the present successful method of treating arthritic patients. To produce the best results anti-arthritic therapy must combat not only the joint changes, but also the systemic disturbances so frequently encountered in chronic arthritis. This systemic approach requires a multiphasic therapeutic regimen which must include correction of disturbed physiologic functions, optimal nutrition, elimination of foci of infection, mental and physical rest, supervised exercise, physical therapy, and orthopedic measures.

Because of its rational composition, Darthronol merits inclusion in every anti-arthritic program. The pharmacodynamic and nutritional influence of its nine active ingredients makes it an efficacious therapeutic measure whenever the chronic arthritides must be combated.

*The Primer on Arthritis prepared by a Committee of The American Rheumatism Association and published in The Journal of the American Medical Association, volume 119, page 1089, August 1, 1942.

Complete bibliography on request



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DARTHRONOL

A ROERIG PREPARATION

National Expansion of Medically-Sponsored Voluntary Group Health Care Plans

The Conference of Presidents and Other Officers of State Medical Associations, in session on December 2, 1945, in Chicago, adopted by unanimous vote a most important resolution which was subsequently presented to the AMA House of Delegates:



CHICAGO CONFERENCE OF PRESIDENTS, DECEMBER 2, 1945
PRESIDENTS OF STATE MEDICAL SOCIETIES

(Front Row): C. H. Gellenthien, M.D., New Mexico; W. A. Bunten, M.D., Wyoming; J. H. Howard, M.D., Connecticut; P. K. Gilman, M.D., California; G. A. Unfug, M.D., Colorado; L. H. Schriver, M.D., Ohio; Cleveland Thompson, M.D., Georgia.

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(Back Row): A. S. Bristow, M.D., Missouri; G. H. Anderson, M.D., Washington; R. T. Woolsey, M.D., Utah; R. D. Bernard, M.D., Iowa.

Present at Conference but absent when picture was taken: E. P. Coleman, M.D., Illinois; A. P. Leighton, M.D., Maine; W. L. Estes, Jr., M.D., Pennsylvania; W. C. Chaney, M.D., Tennessee; P. R. Minahan, M.D., Wisconsin.

WHEREAS, group health care programs, sponsored and operated by the medical profession in many parts of the country, are providing the means whereby millions of persons are able to secure good medical care and hospital service on a voluntary budgeted basis; and

WHEREAS, This health care has been rendered in a manner highly satisfactory to both patient and physician, resulting in better understanding between both; and

WHEREAS, The voluntary type of group health care is to be preferred—in the interest of the people's health—to compulsory, political control; and

WHEREAS, Some areas of the country have no such programs in operation at the present time; and

WHEREAS, A large proportion of the people desire group health service on a national basis; therefore be it

RESOLVED, That the President and other officers of every State Medical Society use their best efforts to secure prompt action by their State Society in inaugurating new, or increasing the benefits of existing pre-payment health care programs in every state; and be it further

RESOLVED, That the American Medical Association Council on Medical Service and Public Relations be instructed by the American Medical Association House of Delegates to correlate the various voluntary state and local programs in order to develop a group health care plan on a *national* basis, with uniform principles, rates, and reciprocity between all, for the benefit of subscribers located in all parts of the country.

The AMA House of Delegates approved this resolution on December 5, by adopting the report of the Reference Committee on Legislation and Public Relations which read in part:

"Your reference committee has reviewed several resolutions calling for the adoption of voluntary prepayment medical care plans. **All of these plans show a uniformity of desire for the immediate setting up of a national plan on a voluntary basis. In all of them the urgency of this being done is stressed. Accordingly your reference committee recommends that the House of Delegates of the American Medical Association instruct the Board of Trustees and the Council on Medical Service and Public Relations to proceed as promptly as possible with the development of a specific national health program, with emphasis on the nationwide organization of locally administered prepayment medical plans sponsored by medical societies.**"

(Continued on Page 158)



For the symptomatic relief of sinusitis...

"The benzedrine inhaler is an excellent vasoconstrictor and unless overindulged in, it may be used conveniently for long periods without deleterious results." Moore, J. H.: A Resume of Conservative Sinus Management, Southern Med. J. 34: 848-854

The vasoconstrictive vapor of Benzedrine Inhaler, N.N.R., diffuses evenly throughout the upper respiratory tract, opening sinal ostia and ducts which are frequently inaccessible to liquid vasoconstrictors. The sinuses drain. Headache, pressure pain, "stuffiness" and other unpleasant sinusitis symptoms are relieved. Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 200 mg.; menthol, 10 mg.; and aromatics. Smith, Kline & French Laboratories, Phila., Pa.



Benzedrine Inhaler

...a better means of nasal medication

(Continued from Page 156)

Action by AMA

The Council on Medical Service and Public Relations sprang into action. It appointed a subcommittee which held meetings in Toledo on December 16 and in Chicago on January 11. A specific national health program was developed, following the instruction of the AMA House of Delegates, and was presented to the Board of Trustees.

On February 12, the Board approved the general principles and created a division of Medical Care Plans under the Council on Medical Service. Further, it instructed that a director be employed at once to integrate voluntary group medical care plans in every state in the Union and to standardize existing programs, insofar as possible, for the benefit of subscribers. The Council on Medical Service is to award the use of its seal by all approved medical care plans.

Simultaneous with this progressive action by the AMA Board of Trustees, the medical care plans of the United States incorporated in Illinois on February 12 as the "Associated Medical Care Plans, Inc." This corporation will also stimulate the organization and spread of voluntary group health care programs, to the end that all persons who desire protection may find it available in all parts of the United States.

* * *

The Conference of Presidents and Other Officers of State Medical Associations is to be congratulated on its initial success in obtaining prompt action on a matter of such grave import as that contained in its resolution on Voluntary Group Health Care Programs.

Other resolutions adopted by the group are as follows:

Resolution Re Formation of a National Health Congress

WHEREAS, Proposed federal legislation to socialize health service would regiment doctors of medicine, dentists, hospitals, nurses, pharmacists, and the people whom they serve; and

WHEREAS, The Medical and allied health professions are intensely interested in bringing the greatest amount of health protection to all people in this nation, through those means which will both preserve and extend the high standards of health now prevailing in this country; and

WHEREAS, In order to preserve quality health care for the people of this nation, each of these groups favors voluntary non-profit prepayment plans instead of health services under compulsory governmental control; and

WHEREAS, While each of the groups in the health field has its own organization, working independently for the preservation of the American system of health care, an over-all body or council is necessary to integrate the necessary collective thinking and activity of all organizations or units; and

WHEREAS, A serious and immediate need exists to develop a working liaison or congress of all agencies in the health field to secure the most effective results of action and public education; therefore be it

RESOLVED, That this body recognizes the need for a National Health Congress representative of the medical, dental, hospital, nursing, pharmaceutical and allied professions, and that it approves the creation of such a coordinating body; and be it further

RESOLVED, That the American Medical Association Council on Medical Service and Public Relations be instructed by the American Medical Association House of Delegates to take the initiative in bringing together the interested groups to organize and incorporate immediately a National Health Congress; this Congress to undertake to bring to all the people of this nation the complete benefits of modern Medical-Dental science and the finest hospital facilities; this Congress to arrange for budgeting the cost of such services at monthly rates within the financial means of all Americans through voluntary, non-profit health plans; this Congress to speedily work for the institution of such voluntary non-profit health plans in those places or localities where they do not now exist.

Upon motion this resolution was adopted by unanimous vote.

Resolution Re Modern Medical Public Relations

WHEREAS, The economic trends of medicine point to an increasing effort on the part of organized minorities to regiment medicine; and

WHEREAS, The medical profession must take the public more and more into its confidence and tell all the people what Medicine has done, is doing, and intends to do for the public good; and

WHEREAS, Organized medicine urgently needs full-time public relations activity not only on a national level but in every State of the Union to inform the public properly of its ideals and programs; therefore be it

RESOLVED, That the President and other officers of each State Medical Society use their influence to create a well-financed public relations program in every State Medical Society at the earliest possible moment; and be it further

RESOLVED, That the American Medical Association Council on Medical Service and Public Relations be instructed by American Medical Association House of Delegates to offer sustained leadership to State Medical Societies in their public relations programs, especially through the example of an immediate and outstanding program of medical public relations on a national level employing newspapers, commercial radio and movies, and all other modern media, to bring Medicine's glorious story to the American people.

Upon motion this resolution was adopted by unanimous vote.

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BE SURE it's in *your* bag! Confidence in meeting the ever-present possibility of respiratory failure is assured when you know that you have the 5 cc. ampuls of Coramine with you. Prompt, powerful respiratory stimulation results from intravenous dosage of 5 cc. or more. Coramine's low toxicity, assuring a wide margin of safety, allows repetition of this dosage in cases where initial clinical response is not adequate.

CORAMINE—*Trade Mark Reg. U. S. Pat. Off.*

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Michigan Rheumatic Fever Control Program



RHEUMATIC FEVER CONSULTATION AND DIAGNOSTIC CENTERS

Chairmen

Ann Arbor—H. H. Riecker, M.D.,
Bay City—L. Fernald Foster, M. D.,
Flint—Lafon Jones, M. D.,
Grand Rapids—H. C. Robinson, M. D.,
Jackson—Frank Van Schoick, M.D.,
Kalamazoo—H. S. Heersma, M. D.,
Lansing—H. L. French, M. D.,
Marquette—M. Cooperstock, M. D.,
Traverse City—Mark Osterlin, M. D.,

Co-operating with the Michigan State Medical Society in its Rheumatic Fever Control Program are the Michigan Crippled Children Commission and the Michigan Society for Crippled Children and Disabled Adults, Inc.

THE *End Results* ARE WHAT COUNT



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Backed by Years of Research

BAKER'S MODIFIED MILK

Meets Doctors' Demands...Infants' Needs

• A complete milk diet that closely conforms to human milk... a nutritious food for infants that may be used either complemental to or entirely in place of human milk . . . well tolerated by both premature and full-term infants... a food that may be used from birth until the end of the bottle feeding period—without changing the formula... a diet that means a well-nourished, happy baby.

These are "end results" of the years of research back of Baker's Modified Milk.

What the attainment of these results means to doctors is attested by the steadily increasing use of Baker's Modified Milk, which is advertised only to the medical profession. More and more doctors are prescribing Baker's Modified Milk because they find Baker's produces desired results with less trouble in most cases of infant feeding... that no change in dilution is needed as the baby grows older (just increase the quantity of feeding) . . . and the possibility of errors—always present when formulas are prepared in the home—is avoided.

To prepare Baker's for feeding merely dilute it to the prescribed strength with water, previously boiled. Baker's is available in both powder and liquid forms. Formulas made from liquid Baker's are especially easy to prepare; in some cases, such as the lack of refrigeration in hot weather, or when traveling, the powder form is preferable.

Doctors and hospitals are invited to write for full information and samples.

• Baker's Modified Milk is made from tuberculin-tested cows' milk in which most of the fat has been replaced by animal and vegetable oils with the addition of lactose, dextrose, gelatin, iron ammonium citrate, vitamins A, B1 and D. Not less than 400 units of vitamin D per quart.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

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THE BAKER LABORATORIES, INC., CLEVELAND, OHIO

BRANCH OFFICES: SAN FRANCISCO, LOS ANGELES and DENVER

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From September 18, 1945, to January 15, 1946

Anonymous, in Memory of his Mother	$ 1,000
Audrey V. Asselin, M.D., Detroit	5
Barry County Medical Society	50
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85
C. D. Brooks, M.D., Detroit	1,000
J. D. Bruce, M.D., Ann Arbor	1,000
A. S. Brunk, M.D. Detroit	1,000
E. I. Carr, M.D., Lansing	1,000
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C. V. Costello, M.D., Holland	1,000
H. H. Cummings, M.D., Ann Arbor	1,000
A. C. Curtis, M.D., Ann Arbor	15
Dickinson-Iron County Medical Society	80
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L. J. Gariepy, M.D., Detroit	1,000
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Hillsdale County Medical Society	95
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L. E. Holly, M.D., Muskegon	1,000
Houghton-Baraga-Keewenaw Medical Society	140
R. J. Hubbell, M.D., Kalamazoo	1,000
Huron County Medical Society	55
Wm. A. Hyland, M.D., Grand Rapids	1,000
Ingham County Medical Society	572.50
Jackson County Medical Society	350
Joint Committee on Health Education	1,000
Francis Jones, M.D., Lansing	1,000
Lenawee County Medical Society	125
Mason County Medical Society	35
Menominee County Medical Society	55
Michigan Medical Service	10,000
Mrs. Katharine B. Miner, Flint	1,000
H. L. Morris, M.D., Detroit	1,000
Muskegon County Medical Society	310
Cora B. Neal, Grand Rapids	1,000
Lawrence Reynolds, M.D., Detroit	1,000
J. M. Robb, M.D., Detroit	1,000
St. Clair County Medical Society	220
G. B. Saltonstall, M.D., Charlevoix	1,000
E. F. Sladek, M.D., Traverse City	5,000
Ferris N. Smith, M.D., Grand Rapids	1,000
C. L. Straith, M.D., Detroit	1,000
Ralph Wadley, M.D., Lansing	1,000
H. L. Weitz, M.D., Traverse City	100
John O. Wetzel, M.D., Lansing	1,000
E. R. Witwer, M.D., Detroit	1,000

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Res. Add. ..... City.....

I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION
2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning September 19, 1945, the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
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or **(2) In War or Victory Bonds** ☐ to be paid in the total sum ☐ or in annual payments of $.....

or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

.....

or **(5) In my Will** ☐

SIGNATURE .....





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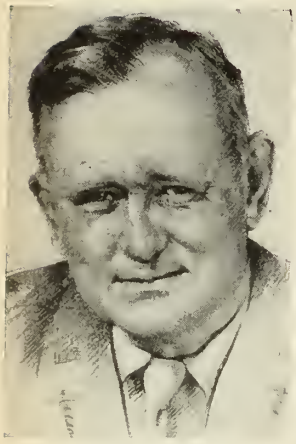
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Biolac is a liquid modified milk, prepared from whole and skim milk with added lactose, and fortified with vitamin B_1, concentrate of vitamins A and D from cod liver oil, and iron citrate. Evaporated, homogenized and sterilized, Biolac is available in 13 fl. oz. cans at all drug stores.

Quickly prepared . . . easily calculated: 1 fl. oz. Biolac to 1½ fl. oz. water per lb. of body weight.

Veterans' Medical Care in Michigan



Maj. Gen. Hawley

"Home town care of veterans" for service-connected disabilities, with free choice of doctors, is offered as a standard practice for the first time through the far-reaching agreement signed December 27, 1945, by representatives of the Veterans Administration and the Michigan State Medical Society.

By moving to use existing agencies, Gen. Omar N. Bradley, Veterans Administrator, and Maj. Gen. Paul R. Hawley, Acting Surgeon General, have:

Introduced a practical plan for veterans medical and hospital care which can be in full operation in months rather than years.

Developed a pattern which, if pursued nationally, will save much time and expense otherwise required for travel of veterans to veterans institutions.

Advanced further toward Gen. Bradley's announced policy of decentralization, so that local needs can be met most effectively.

The agreement, which already has become a blueprint for care of veterans throughout the nation, permits veterans to receive treatment and care from local doctors of medicine. In a great many cases it will make it unnecessary for veterans to leave families, friends, and family physicians to go to veterans institutions which may be distant from their homes.

Doctors providing service to veterans are reimbursed through Michigan Medical Service, the non-profit pre-payment organization established by the Michigan medical profession. In turn, the actual cost to Michigan Medical Service is re-paid by the Veterans Administration.

In practice, the program works much like that by which Michigan Medical Service now provides medical services to more than 868,000 residents of Michigan.

For treatment or care necessitated by service-connected disability, the male veteran applies by mail, or by telephone in emergencies, to the Veterans Administration; he secures a case number permitting him to obtain a medical examination from any doctor of medicine participating in the program; after the examination—to determine if it is a case of the type provided by the veterans program—the veteran obtains authorization from the Veterans Administration for treatment. Immediately, Michigan Medical Service is authorized to make payment for medical care. Veterans Administration offices have been opened near M.M.S. headquarters in Detroit so that authorization of payments will not be delayed.

Special provisions are made for veterans of the women's services. Since they cannot be accommodated at present in all Veterans Hospitals, they are entitled to local care for both service-connected and non-service-connected disabilities.

The schedule of fees paid to doctors has been approved by the Veterans Administration. This is the Uniform Fee Schedule for Governmental Agencies, adopted by the 1945 MSMS House of Delegates after a special committee of the Michigan State Medical Society had given it prolonged study.

PARTICIPATION BLANK

All MSMS members are urged to become participating physicians under the V.A. plan, since veterans are being told to seek medical care from their own doctors. If you have not already done so, execute the participation blank printed below and rush to Secretary L. Fernald Foster, M.D., 2020 Olds Tower, Lansing 8.

Please file my acceptance of appointment as a fee-designated physician under the plan for veterans' care outlined in your Secretary's Letter No. 98 dated December 26, 1945.

(Signed)..... M.D.

..... Street .....
(Date)

City .....

New and unusually effective

White's OTOMIDE



for topical chemotherapy in acute and chronic ear infections

The unique clinical advantages of this stable, non-irritating solution of sulfanilamide, urea and chlorobutanol may be briefly summarized as follows:

POTENTIATED ANTIBACTERIAL ACTIVITY—urea-sulfanilamide mixture more effective than either drug used independently.[1] Not inhibited by pus and tissue debris.

BETTER TISSUE DIFFUSION—urea-sulfanilamide mixture diffuses more actively through living and dead tissues.[2]

TOLERANCE—freedom from alkalinity virtually obviates local chemical irritation.

ANALGESIA—effective chlorobutanol analgesia without impaired sulfonamide activity.

WIDE FIELD—effective in BOTH acute AND chronic otologic infections. Active against certain sulfonamide-resistant bacteria.[3]

FORMULA:

Sulfanilamide	5%
Carbamide (Urea)	10%
Chlorobutanol	3%
Glycerin (high sp. gr.)	q.s.

1. Tsuchiya, H. M. et al: Proc. Soc. Exp. Biol. and Med., *50*:262, 1942.
2. McClintock, L. A. and Goodale, R. H.: U. S. Naval Med. Bull., *41*:1057, 1943.
3. Strakosch, E. A. and Clark, W. G.: Minn. Med., *26*:276, 1943. Brown, C. et al: Am. J. Surg., to be published.

Available in dropper bottles of one-half fluid ounce (15cc.)
—on prescription only.

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Public Relations Counsellor



HUGH W. BRENNEMAN

Hugh W. Brenneman was appointed Public Relations Counsel for the Michigan State Medical Society by The Council in annual session, January 19, 1946. His headquarters will be at 2020 Olds Tower, Lansing. As Lt. Brenneman he has shortly returned from naval service as a Destroyer Communication and Public Relations officer.

For seven years previous to the war he was active in public education and in the various fields connected with dissemination of information to the public.

Graduating from Alma College in 1936 he left an enviable record in all-round scholarship and collegiate activity. The record shows him to be the Michigan State Intercollegiate oratorical champion in 1935, Publicity Director of Alma College in 1936, four years a varsity debater, track athlete, member of the a Capella choir and the Alma College Band of which he was president in 1935 and 1936. In the latter capacity he wrote, directed and produced an all-college three-act musical comedy that received national recognition. Much of his schooling was paid for by his work as a representative of the Associated Press and outstate newspapers.

Upon graduation, he became active in secondary school work as a Public Speaking teacher and three years later was made principal of the Consolidated High School at Mesick, Michigan. In 1940 he was named president of the Wexford-Missaukee Teachers Association. In 1941 he deserted the school field for the larger teaching opportunities of radio. Employed by Radio Station WTCM in Traverse City, Michigan, he was soon a valued announcer and in charge of all educational programs on the station. His work attracted attention and he moved to the larger radio station WFDF at Flint, Michigan. As news announcer and in connection with the educational programs leading up to the war effort, he became well known in central Michigan. He was instrumental in the organization of the Rainbow Radio Productions Company.

Mr. Brenneman is thirty years of age, is married to the former June Redman of Ithaca, Michigan. They have one son, aged seven months.

Mr. Brenneman is new, but not unknown to us. His qualifications are such that we can expect results within a reasonable time.

The job of medical public relations is new; the work to be done is big; the difficulties many; there are few precedents to follow.

Mr. Brenneman needs the complete co-operation of every practitioner of medicine in his work of interpreting to the public the socio-economic problems of medical practice. If the members aid him in his work, and make use of his services at every available opportunity, we feel sure he will make the augmented public relations program of the Michigan State Medical Society a proud success.

MSMS ANNUAL SESSION

Wednesday, Thursday, Friday

September 25-26-27, 1946

BOOK-CADILLAC HOTEL

DETROIT

• A VICTORY MEETING •

MEDICAL LAW ENFORCEMENT

(Continued from Page 152)

Circuit Court on the charge of practising medicine without a license. Later the case was taken up by the presiding judge, another attorney was hired, his plea of guilty was withdrawn, and the case was referred back to Circuit Court for trial.

On October 31, 1945, the case was finally heard in Circuit Court in Allegan. After forty minutes' deliberation, the jury brought in a verdict of guilty. Kopprasch was fined twenty-five dollars and costs or sixty days in the county jail.

EDITOR'S NOTE: This case will be of interest to older practitioners in the Southern part of the state, as Dr. Kopprasch appeared against several of them in malpractice suits.

WAITING ROOM THERAPY

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Treatment of your patients starts the moment they enter your waiting room. The little friendly gestures directed for their comfort create a relaxed and warm attitude toward their Doctor. What could be better than to have a copy of their favorite daily newspaper, "The Detroit Times," waiting for them? It will give your reception room a timely and up-to-the-minute touch, with its host of sparkling, compact features.

A Supply of Stickers



To emphasize your courtesy to the patient and to keep the newspaper in good order for the next reader —we have prepared a simple and attractive gummed sticker which can be attached to each day's paper in the twinkle of an eye by your nurse. The wording is as follows: "*Dear Patient . . . Your Doctor has arranged to have this paper here as a courtesy to you. Please leave it neatly together for the next person. Thanks.*" A supply of these stickers, at no charge of course, will be sent to you on request with your subscription.

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THE DETROIT TIMES

A GOOD NEWSPAPER

Medical Veterans' Readjustment

INDUSTRIAL HEALTH CONFERENCES

A series of thirteen weekly conferences entitled "Advanced Procedures in Industrial Employment" opened Wednesday evening, January 9, 1946, under the sponsorship of the Wayne University School of Occupational Health, according to Dr. Raymond Hussey, dean of the School and chairman of the series. The first session will begin at 4:30 p.m, in the eighth floor conference room of the Crowley-Milner East Building and will continue until 9:00 p.m., with an intermission for dinner.

Speaking at the conferences will be internationally known authorities in the field, including Dr. William P. Yant, Mine Safety Appliance Company, Pittsburgh; Dr. H. D. Storms, Director, Rehabilitation Clinic, Toronto; Miss Marjorie Fish, Director of Occupational Therapy, Columbia University Medical Center; Dr. W. A. Sawyer, Medical Director, Eastman Kodak Company, Rochester; Dr. C. O. Sappington, Mellon Institute, Pittsburgh; and Dr. Harvey Bartle, recently retired as Medical Director, Pennsylvania Railroad.

Says Dr. Hussey, "The subject of these new conferences is both vital and timely. Experiences during the war just terminated have yielded much new information about selective job placement, the care of disabling illnesses, and the restoration of injured persons. Today, when proper procedures are followed, the period of disability can be held to a minimum and be followed by maximum restoration and complete vocational rehabilitation.

"We will welcome the enrollment of plant personnel directors, superintendents and others who work directly with employe activities, as well as physicians who are interested in the practice of medicine as it relates to industrial health."

The complete program for the series is as follows: January 9, "Recovery and Convalescence as Related to Traumatic Injury"; January 16, "Occupational Restoration Following Traumatic Injury"; January 23, "Evaluation of Occupational Capacity and Ability Following Traumatic Injury"; January 30, "Employment of Handicapped Persons"; February 6, "Occupational Therapy and Vocational Rehabilitation"; February 13, "Selective Job Placement and Job Adjustment"; and February 20, to be announced.

February 27, "Developments in the Field of Industrial Safety"; March 6, "The Relation of Nutrition to Industrial Employment"; March 13, "Relation of Private Practitioner to Employe Health Programs"; March 20, "Special Problems of Women in Industrial Employment"; March 27, "Medical Examinations in Relation to Industrial Employment"; and April 3, "Administrative Medicine in Industrial Organization."

A folder describing the series in detail may be obtained at the Office of the Dean, School of Occupational Health of Wayne University, 4072 Penobscot Building, Detroit 26.

OPPORTUNITY DESIRED

A young doctor of medicine writes as follows:

"I am interested in assisting or becoming associated with some older physician in Michigan with the view in mind of eventually buying his practice.

"In 1941 I graduated from Rush Medical College, University of Chicago, and had a one year rotating internship at Ancker Hospital, Saint Paul, Minnesota, 1941-42.

"I am twenty-eight years of age, married and of Norwegian descent.

"In July, 1942, I was inducted into the Army and served three years overseas as follows: nineteen months with a portable surgical hospital; six months with a psychiatric unit and nine months with a general hospital doing general medicine. At present I am on terminal leave and shall be formally released February 26, 1946."

Address Capt. S. care JMSMS, 2020 Olds Tower, Lansing 8, Michigan.

REFRESHER TRAINING FOR DOCTORS LEAVING SERVICE

Refresher training of twelve weeks' duration will be given Army doctors leaving the service who desire to brush up on latest developments in fields of medicine, surgery, or neuropsychiatry in which they may not have been actively practicing during the past year, Major General Norman T. Kirk, Surgeon General of the Army, announced January 1, 1946.

This training which will prepare retiring Army doctors for return to private practice with latest knowledge of medical advances made during the war, will be given at Army hospitals until June 30, 1946. Reserve Corps, National Guard, and AUS Medical Corps officers who are to be separated will be eligible for this schooling.

The election of the period of refresher training is entirely voluntary, and applications may be made through channels to The Surgeon General in the case of medical officers assigned to the Army Service Forces, Army Ground Forces and Army Air Forces. Medical officers returning from overseas may make application for refresher training from the Reception Stations or Separation Centers through the ASF Liaison Officer directly to The Surgeon General. It is pointed out that medical officers cannot be recalled to active duty from terminal leave for the purpose of accepting a professional assignment for refresher training.

Numerous requests have been received by The Surgeon General from Reserve Corps, National Guard, and AUS Medical Corps officers who are about to be separat-

(Continued on Page 178)

EDITOR'S NOTE: This program was announced too late for most of the men who would have liked it. It should include terms of training at civilian hospitals, however, as the very thing the doctors are trying to remedy is the narrowed experience in military hospitals, and this training is given in army hospitals.

therapeutic action

★ Therapeutically, Ertron is unique in its antiarthritic activity. Many patients in large series of clinical studies have experienced restoration of movement in affected joints, relief of pain and measurable evidence of reduced swelling.

chemical composition

★ It can now be said that chemically, too, Ertron is unique. Ertron differs in chemical composition from the ordinary vitamin D preparations—a fact that undoubtedly accounts for the excellent results obtained with Ertron.

Simply stated, Ertron is electrically activated vaporized ergosterol prepared by the Whittier Process.

Ertron contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure chemical form further establishes the chemical as well as the therapeutic uniqueness of Ertron.

Each capsule of Ertron contains 5 mg. of activation-products having a potency of not less than 50,000 U.S.P. Units of vitamin D.

ertronization therapy

★ To Ertronize the arthritic patient, employ Ertron in adequate daily dosage over a sufficiently long period to produce beneficial results. The usual procedure is to start with 2 or 3 capsules daily, increasing the dosage by 1 capsule a day every three days until 6 capsules a day are given. Maintain medication until maximum improvement occurs. A glass of milk, three times daily following medication, is advised.

Ertron is the registered trade-mark of Nutrition Research Laboratories

Supplied in bottles of 50, 100 and 500 Capsules

Parenteral for Supplementary Intramuscular Injection

Ethically Promoted

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Editorial Comment

THE PEPPER BILL

When the EMIC program was put into effect, medical editors throughout the country, and many lay editors, also, prophesied that that program was an entering wedge, a trial balloon, by socialized medically minded members of the Administration in Washington, and that if it worked, it would serve as a model for similar legislation when that program ended.

Well, here it is.

—*Editorial, Rocky Mountain Medical Journal*
Dec., 1945

* * *

JUST ANOTHER INCIDENT

A few months ago there was nationwide furror over the bureaucratic shortcomings of the Veterans Administration. Shamefully inadequate and obsolete practices were exposed in the veterans hospitals. But the rush of events quickly pushed the incident onto the back pages. And, like many such incidents, the public has heard no more.

Here is a typical illustration of what would happen if the whole country should be included in a politically administered medical system. Individuals would be subjected, as the veterans were and perhaps still are, to questionable or incompetent care. As individuals, they could do nothing more than vent their displeasure. Trying to ferret out officials responsible for ill treatment would be akin to grappling with one's shadow. When the situation became bad enough, a rash of condemnation would appear in the press. Investigation would be promised—as they were in the case of the Veterans Administration—a few of the most glaring faults would be corrected, and then the evil system would settle down for another twenty years or so of dozing dogma and inefficiency.

This is no exaggeration. It is what would be faced by the people if they permit state or socialized medicine, whichever you wish to call it, to settle upon the country. It is the normal procedure of bureaucracy.—Editorial, *Mississippi Doctor,* Dec., 1945.

* * *

AMA HOUSE OF DELEGATES' MEETING

The outstanding feature of the meeting was the passing of a resolution presented by the Council on Medical Service and Public Relations calling for a national health plan. The background of this resolution is interesting. Last April a meeting of the presidents of seventeen state associations was held in Detroit to reach the grass roots of medicine. These representatives were pledged to study the needs of their own state and bring statements of policy to be presented to the Council on Medical Service and Public Relations for transmittal to the House of Delegates. A second meeting was held prior to the meeting of the House, with more than forty states represented, and the resolution coming from this group was a true expression of the sentiment of the rank and file of the medical profession.

The Council on Medical Service and Public Relations also held two meetings with the same objective, one in October and one in November and consequently its resolution emanating as it did from the presidents and representatives of all states, carried the weight of study, thought, and desire.

In my knowledge, this is the first time a subject of such vast importance to the Association has been presented to the House of Delegates after detailed study and in concrete form. A mandate has been given to the trustees and the Council on Medical Service and Public Relations to prepare and activate a national health plan. This should accomplish much toward an answer to government medicine, and I am sure we in Iowa are strong in approval—R. D. Bernard, M.D., President, Iowa State Medical Society.

* * *

HOME-MADE CARE

The selection of Michigan as a proving ground for a Veterans Administration plan of "home-town care" for disabled veterans is a graphic demonstration of the unexpected fruits of home-town initiative.

The announcement of the arrangement makes it clear that Michigan was picked for this unique program of medical and hospital care for former servicemen principally because this state has perhaps the earliest, and by far the largest and most successful, private group medical care plan operating anywhere in the United States—the Michigan Medical and Hospital Services.

And Michigan has this successful medical and hospital service primarily because the leadership of

(Continued on Page 176)

"*Some Griefs Are Medicinable*"
... Cymbeline act III, scene II

Many patients stricken with grief over misfortune or bereavement develop abnormal reactive depressions ... differentiated from normal depressions of mood by their inordinate intensity and stubborn persistence.
With these patients, Benzedrine Sulfate therapy is often dramatically effective.
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Juris ignorantia est, cum jus nostrom ignoramus—Old Maxim

NOTES ON COURT DECISIONS, STATUTES AND OTHER AUTHORITIES

J. JOSEPH HERBERT, LL.B., General Counsel MSMS
Manistique, Michigan

MEASURE OF SKILL IN TREATMENT BY CULTIST—MALPRACTICE—EXPERT TESTIMONY

For years the healing cultist has in the diagnosis and treatment of human ailments had the benefit of two protective rules of law. The first of these is that in a malpractice action he is entitled to have the quality of his services tested by the teachings of his own cult or system. The second, a corollary of the first, is that the answer to whether or not he exercised the requisite care and skill must rest on the testimony of competent practitioners of his own cult or system.

In deed, the principle that a healer's preformance is to be judged by the tenets of his own school was emphatically reaffirmed in the leading Michigan case of Janssen v. Mulder, 232 Mich., 183, lately discussed in this column in another connection (JMSMS June 1945 p. 546). This was a case in which a chiropractor undertook to treat a child suffering from diphtheria. The child died and the chiropractor was sued for malpractice, The court said,

"While not registered, the defendant was a graduate of a chiropractic school. He but assumed to treat human ailments in accordance with the system taught in such school. This fact was well known to plaintiff. The burden was therefore cast upon her to show by competent evidence, not only that his treatment was injurious or not effective, but that the requisite care and skill was not exercised by him in administering it. It necessarily follows that such proof must be made by one engaged in treatment by similar methods to those employed by defendant. With the merits of the several drugless systems of relieving human ailments the courts have no concern. It is sufficient to say that many of our citizens believe in their efficacy and secure the services of those engaged in practicing them. The treatment given by any one of such practitioners would probably be deemed improper and unskillful when judged by physicians who are taught to treat such ailments by the use of drugs and medicines. The unfairness of permitting the test as to whether a particular treatment was proper or skilful to be determined by one who uses a different method, or follows the teaching of another system, must be manifest."

Recently, however, the Wisconsin Supreme Court has made a significant modification of the rule, in the case of Treptau v. Behrens Spa, 20 N.W. 2d. 108 (October 16, 1945).

In effect, the Wisconsin Court said that the old rule will not afford the cultist protection if he employs treatment outside the regular methods advocated by his particular cult or school of healing. The Court also sustained the testimony of doctors of medicine on points in relation to diagnosis and treatment as to which principles of "regular" and "irregular" schools do or should concur.

In light of the fact that today many cultists are in their procedures invading the field of medical practice, the Wisconsin decision certainly offers a more realistic approach to this troublesome problem.

The facts in the Wisconsin case were as follows: The plaintiff, Mrs. Treptau, went to the defendant, Behrens Spa, an incorporated hospital and sanatorium, for treatment of what she thought was a sprain of her right foot. The Spa employed both chiropractors and physicians. She was told by one of the chiropractors that she needed vertebra "adjustments." Two of the chiropractors gave her a number of so-called adjustments, in the course of which the swelling and painfulness of the foot increased greatly. One of the chiropractors then took an x-ray of the foot and, after palpation, pronounced that the patient was suffering from arthritis. Thereupon, the chiropractor applied circular bandages tightly about the foot and ordered heat diathermy treatments to be applied immediately. These heat treatments were continued for several days while the foot was tightly bandaged. The patient complained of great pain, the foot began to swell increasingly and became black and blue. She begged the nurses to help her take the tape off, which they finally did. The plaintiff returned to her home and called a doctor of medicine for treatment. Subsequently the foot lost flexion and became permanently impaired in function. The patient brought suit for malpractice.

On trial, the physician who treated the plaintiff after her chiropractic experience, testified that when he first saw the patient her foot was extremely swollen, tender to touch, discolored and that the condition indicated a markedly impaired circulation as a result of which gangrene threatened. He gave it as his opinion that the impaired circulation and the condition which he found was the result of the constricting tape and diathermic treatments while the tape was in place, and that he believed the treatment which was given was not in accord with the recognized proper practice in that community. Two other physicians testified to like effect.

The defense was twofold, first, that the patient, having consulted a chiropractor, thereby accepted the kind of treatment approved by that school of healing, and

(Continued on Page 176)



gentle reminder

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(Continued from Page 174)

second, that doctors of medicine were not competent to testify as to the degree of care and skill required to be used by a chiropractor in treating a patient. In other words, the defendant relied on the general rule, for which there was considerable authority.

In reviewing the case the Supreme Court had this to say about the rule on which reliance was had by the defendant,

"That rule is not applicable in view of the real issue in this case. Plaintiffs do not claim there was malpractice on the part of the defendant while Beherns was engaged in the practice of chiropractry by chiropractic manipulation or adjustments of the spine. Instead, plaintiffs contend there was malpractice when he and his associates went beyond the practice of chiropractry and entered into the general field of the practice of medicine, by the application of the bandage to the foot and by giving in conjunction therewith, the diathermo heat treatments, neither of which was the practice of chiropractry by chiropractic manipulation or adjustment of the spine. On the contrary, the application of the bandages and the heat treatments given in this case are part of the general practice of schools of medicine, and, in so far as there was thus an invasion of the general field of that practice, the methods thus used by defendant's employes in diagnosis and treatment were subject to the rules applicable in the practice of medicine and surgery. Janssen v. Mulder, 232 Mich. 183, 205 N.W. 159; 78 A.L.R. 701; Joyner v. State of Mississippi, 181 Miss. 245, 179 So. 573, 115 A.L.R. 957; 86 A.L.R. 630. Consequently there was applicable in this case the rule that the considered opinion of a qualified member of the profession of medicine and surgery is competent and proper to determine and testify as to whether or not the treatment given constituted the required degree of care and skill which physicians in good standing in the community usually exercise. When there is such an invasion of the field of medicine by the treatment given, the rule, which confines the inquiry as to the required degree of a practitioner's skill and care to the rules and principles of chiropractry or the particular school of science or medicine to which he belongs, does not exclude the testimony of physicians of the other schools when that testimony bears on a point in relation to diagnosis or treatment as to which the principles of the schools do or should concur. * * * And the fact that chiropractors abstain from the use of words like 'diagnosis,' 'treatment' or 'disease' is immaterial. What they hold themselves out to do and what they do is to treat disease, and the substitution of words like 'analysis,' 'palpation,' and 'adjustment' does not change the nature of their act. Com. v. Zimmerman, 221 Mass. 184, and cases cited on page 189, 108 N.E. 893, Ann. Cas. 1916A, 858. Hence when the defendant assumed to perform that duty he must exercise the care and skill in so doing that is usually exercised by a recognized school of the medical profession."

Recovery by the plaintiff was sustained.

It is interesting to contrast the Wisconsin and Michigan cases. The Michigan court sustained a recovery for malpractice by a chiropractor merely circumvented the old rule without disturbing it. Recovery in the Michigan case was sustained on the theory that the chiropractor was negligent in failing to recognize that the patient was suffering from diphtheria, a disease which he did not profess to treat. In the Wisconsin case, the protective rule was modified by making it inapplicable to situations in which the chiropractor invades the field of medical practice.

It is submitted that the approach employed by the Wisconsin court in solving the problem is not only more reasonable and forthright, but affords patients better protection against malpractice by cultists, who so commonly now are invading a forbidden field.

COMPULSORY HEALTH INSURANCE

The fears and doubts expressed about workmen's compensation, unemployment insurance, and other measures of social security have proved to be without foundation. In the future, when we have succeeded in our struggle for a comprehensive health program for the entire country, we shall be able to say about health insurance, too, that present-day apprehensions and misgivings were groundless.—Senator Robert F. Wagner, U. S. Senate, May 24, 1945.

If the Medical Profession demands its full voice in the making of this program we may be without regrets.

HOME-MADE CARE

(Continued from Page 172)

the Calhoun County Medical Society, back in 1934, launched a county-wide experiment in pre-paid medical care which, despite initial difficulties and setbacks, eventually resulted in the development of the state-wide, private group hospital and medical insurance plan.

The Veterans Administration, as General Bradley frankly acknowledges, is tying in with a program which has long since proved that it is a successful, going concern.

The Calhoun county doctors who grappled with the medical care problem a decade ago could not foresee the unexpected fruits of their initiative; could not envision it as a service to the wounded veterans of a war still several years in the future. But they could see an obvious and glaring community need, and they had the stubborn faith that community initiative could contribute materially to the relief of that need.

That initiative and faith find unexpected vindication in the program announced by General Bradley. And the government's plan for using the facilities of the Michigan Medical and Hospital Services in caring for war veterans argues strongly for preserving such successful, independent health insurance organizations under any national health program which congress may consider.

Community initiative has proved its worth in the past. Given the opportunity, it could continue to do so in the future.—Editorial, *Battle Creek, Enquirer-News,* Dec. 30, 1945.

C C CRISS, PRESIDENT

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EARL B. BRINK, MANAGER
BILL O BRINK ASST MGR

February, 1946

Dear Doctor:

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This is the world's largest exclusive health and accident company, serving more than 1,500,000 policyholders. More than $165,000,000.00 has been paid in claims.

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More physicians and surgeons protect their own incomes with Mutual of Omaha than any other exclusive health and accident company—a fact of which we are justifiably proud.

In Michigan, we pay all claims direct from our Detroit offices within 24 hours after we receive your completed claim blank. And to give the most dependable, efficient service possible, we maintain branch offices in all principal cities of Michigan. We'll be happy to serve you any time.

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State Manager



P.S. Have you heard "Freedom of Opportunity?" Sunday nights at 10 EST. WHDF, Calumet—WDBC, Escanaba—WJMS, Ironwood—WKLA, Ludington — WDMJ, Marquette — WKBZ, Muskegon — WHLS, Port Huron — WTCM, Traverse City—WATT, Cadillac—and Fridays at 8:30, CKLW, Detroit.

LARGEST EXCLUSIVE HEALTH & ACCIDENT COMPANY IN THE WORLD — MILLIONS PAID IN BENEFITS

Political Medicine

EDITOR'S NOTE. The following is published in full, to show our members to what a Doctor of Medicine can degenerate. It was released January 4, 1946. Several holders of USPHS commissions have resigned in protest.

FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE
Washington 14
(Bethesda Station)

December 10, 1945

TO: All officers of the Public Health Service
Subject: The National Health Program

Enclosed is a copy of House Document No. 380 which is the full text of President Truman's message to the Congress on a National Health Program, a subject of the highest importance to every citizen. The message contains a comprehensive analysis of the health problems of the country and recommendations as to the pattern of legislation to deal with them.

It is a source of particular satisfaction to all of us who labor for the public health advancement that this should be the special subject of a Presidential message. For the first time we have the major elements of a national health policy officially stated in comprehensive terms. This has been a goal of all public health workers for many years, and the enunciation of such a policy by the Chief Executive gives the Public Health Service definite objectives for its future work.

On the same day as the message was delivered, Senator Wagner introduced (for himself and Mr. Murray) S. 1606 and Representative Dingell introduced H.R. 4730 designed to implement the proposals of the President. In addition, several bills are pending in the Congress dealing with special phases of the President's legislative program. These include the hospital construction bills, the national mental health bills, and the stream pollution bills, each of which would impose substantial additional responsibilities upon the Public Health Service.

The appropriate executive agencies of the Government have been specifically instructed by the President to assist in carrying out his legislative program as presented to the Congress on September 6. The President wrote to the Administrator of the Federal Security Agency on October 4 requesting him "to take primary responsibility for legislative measures necessary to carry out the part of my message (September 6, 1945) outlined in Section 21 concerning a national Health program to provide adequate medical care for all Americans and to protect them from financial loss and hardship resulting from illness and accident."

Every officer of the Public Health Service will wish to familiarize himself with the President's message and will be guided by its provisions when making any public statement likely to be interpreted as representing the official views of the Public Health Service.

(Signed) THOMAS PARRAN
Surgeon General

SOCIALIZED MEDICAL PROGRAM

The socialized medicine program received a cool reception in the House following showing by insurance industry that 40,000,000 persons already are covered by voluntary health and accident policies—a five-fold increase over 1939.

More than 400 companies now write health and accident insurance. Total premiums in '44 were $525,000,000 for this class of business, exclusive of hospital service policies.

In addition, more than 5,000,000 persons carry prepaid medical care programs, covering hospital and surgical bills. Almost half of the latter group are covered by employer-sponsored plans in industry. Next, 17,500,000 participate in Blue Cross Hospital plans.

Consolidating all these voluntary protection measures, Insurance Economics Society of America concludes that at least half the population insures itself against medical costs; another 40 per cent handle these emergencies on pay-as-you-go basis without hardship.—*Nation's Business*, February, 1946.

UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES

State Vocational Rehabilitation is adopting for its clients the uniform fee schedule for governmental agencies set up by the Michigan State Medical Society with the exception that the ceiling for surgical service is to be $75.00 to this Agency. This $75.00 ceiling is the figure set up by the legislature for the Michigan Crippled Children Commission; Vocational Rehabilitation feels that two state agencies purchasing surgical services should have comparable rates for such services.

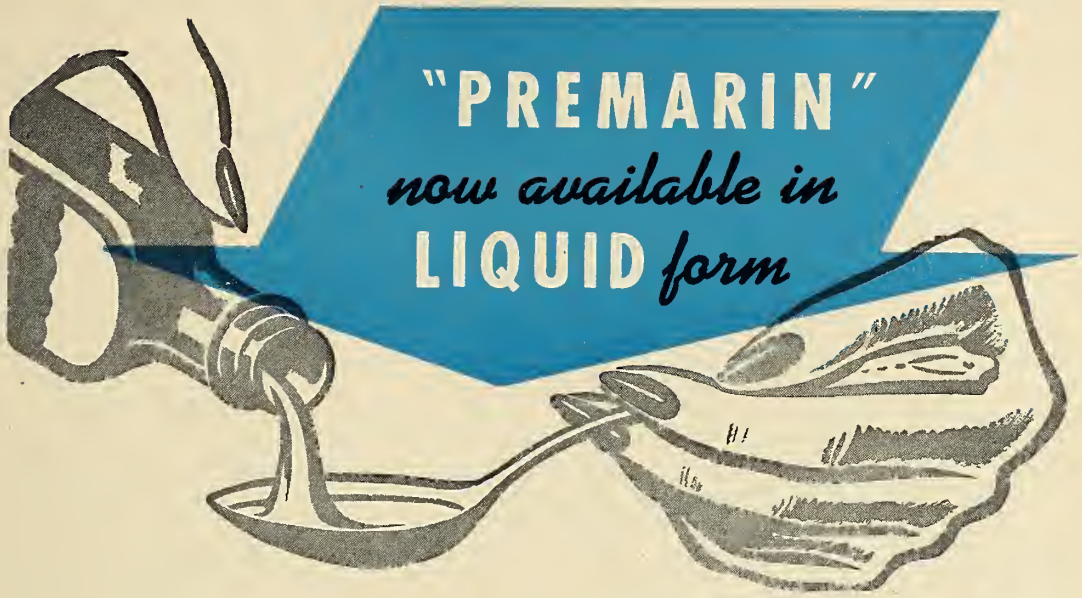
State Vocational Rehabilitation is glad that such a schedule has been set up for governmental agencies as it does away with a multiplicity of schedules prevailing in the past. It is felt the new schedule will go far in furthering professional relations between the doctors and Vocational Rehabilitation.

REFRESHER TRAINING FOR DOCTORS LEAVING SERVICE

(Continued from Page 168)

ed and who desire to remain in service for a short period of professional duty prior to return to civilian life. These officers are anxious to return to their civilian practices with the advantages of the latest medical knowledge. Due to the tremendous demand for refresher training placed upon civilian medical teaching centers, many of these medical officers have been unable to arrange for refresher training.

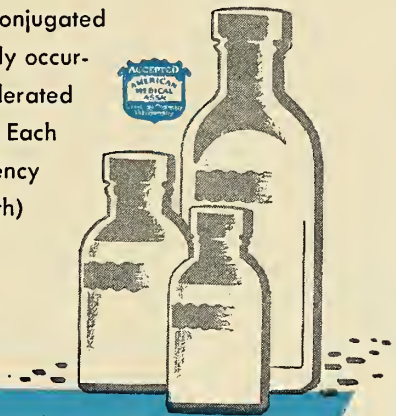
The Surgeon General emphasizes the fact that the refresher training is accomplished by a 12-week temporary duty assignment in the professional field of interest at an Army hospital without per diem. Such an assignment will afford the medical officer a period of clinical work under supervision, and excellent opportunities for collateral study of recent advances in medicine, surgery, and neuropsychiatry.



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Available in bottles of 120 cc. (4 fluid oz.), No. 869



"Premarin" Reg. U. S. Pat. Off. **NOW IN LIQUID AND TABLET FORM**

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War Medicine

GENERAL MacARTHUR PAYS TRIBUTE TO MEDICAL SERVICE

"War through the ages has demanded in large degree the help of those who practice the art of healing. Never has such need been greater than in the Pacific. Early in the campaign disease presented its most serious threats. Vigorous action has eliminated much of that hazard. The application of old principles and newly devised measures on a magnified scale has assured our advance against the hazards of nature.

"Almost impenetrable terrain and vast distances have not prevented our doctors from pressing close to the enemy line to give the wounded immediate care. Air evacuation reached its highest development in transporting casualties from the field to hospitals far in the rear. New drugs have accomplished miracles in treatment. And in consequence the command has been maintained in a gratifying state of health with the rate of recovery of the sick and wounded unsurpassed.—Douglas MacArthur, J. Mil. Med. in Pacific.

MEDICAL DEPARTMENT PERSONNEL IN ETO GET TOTAL OF 22,304 AWARDS

Medical Department personnel in the European Theatre of Operations have received a total of 22,304 awards between the period of December 7, 1941 and October 1, 1945, including ninety-seven Distinguished Service Crosses and 2,849 Silver Stars, according to a recent announcement by the Office of The Surgeon General.

Enlisted men of the Medical Department received 17,974 of the awards, officers 3,758, and nurses 572.

The 32,000 officers of the medical service in this theatre (not including nurses) received four Distinguished Service Crosses, 196 Legions of Merit, four Clusters to the Legion of Merit, 200 Silver Stars, twenty Clusters to the Silver Star, 304 Soldier's Medals, 2,716 Bronze Star Medals, 308 Clusters to the Bronze Star, three Air Medals, and three Clusters to the Air Medal.

The Congressional Medal of Honor was received by one of the 202,000 Medical Department enlisted men in the European Theatre of Operations. They also received ninety-three Distinguished Service Crosses, sixteen Legions of Merit, 2,646 Silver Stars, 110 Clusters to the Silver Star, 202 Soldier's Medals, 13,779 Bronze Star Medals, 808 Clusters to the Bronze Star Medal, 227 Air Medals, and ninety-two Clusters to the Air Medal.

ARMY DOCTORS MAKE OVER ONE MILLION PHYSICAL EXAMINATIONS DURING OCTOBER

Over 1,250,000 physical examinations of Army officers and soldiers being demobilized in the United States were completed by Army doctors during October, The two thousand Army doctors assigned to separation centers alone completed examinations of 757,433 men during this period. In addition, Army doctors are assigned to other separation offices.

It is the policy of the Army, General Kirk said, to see that every man being released from the service is given the ultimate medical care before returning to civilian life. In addition, he pointed out, in order to speed demobilization, the complete physical examination has been so planned that the average soldier is processed by eight different doctors in one hour from the time the first doctor sees him, provided he has no ailment.

In this chain of medical examinations he is looked over by a dentist, eye specialist, ear, nose and throat specialist, orthopedist, surgeon, urologist, and internist. Finally an over-all medical officer, who has before him the reports of all preceding examinations, including all x-rays and laboratory tests, with the exception of serology, determines his physical condition. If it is necessary the man is referred to a ninth doctor—a psychiatrist.

CRITERIA FOR RELEASE FROM THE ARMY

Major General Norman T. Kirk, The Surgeon General, has announced the following new separation plan which became effective January 1, 1946.

The following specialists in scarce categories will be released with a critical score of 80, continuous service since Pearl Habor, or if the age of 45 has been reached: eye, ear, nose specialists; orthopedic surgeons; and internal medicine specialists.

A requirement of 70 points, 45 months' service, or 45-year age limit will make the following eligible for separation: gastroenterologists, cardiologists, urologists, dermatologists, anesthetists, psychiatrists, general surgeons, physical therapy officers, radiologists, and pathologists.

Plastic surgeons will be eligible for release if they have a critical score of 80, or service since Pearl Harbor, or if they are 48 years of age.

ADVANTAGES OF ARMY CAREER FOR DOCTORS

The advantages of an Army career for doctors and other officers who are appointed members of the Medical Department under the new law authorizing additional officers for the Regular Army were stressed in a statement by Major General Norman T. Kirk, The Surgeon General of the Army.

Under the terms of this recently enacted law, doctors who apply for appointment and meet the requirements will be given commissions in the grades of First Lieutenant, Captain and Major.

The Army expects to attract a competent staff of doc-

(Continued on Page 182)

More pleasure to you, Doctor!

THREE nationally known research organizations recently reported the results of a nationwide survey to discover the cigarette preferences of physicians and surgeons.

Physicians all over the United States were asked the simple question: "What cigarette do you smoke, Doctor?" The question was put solely on the basis of *personal preference as a smoker.*

The thousands and thousands of answers from these physicians in every branch of medicine were checked and re-checked. The result:

More physicians named Camel as their favorite smoke than any other cigarette. And the margin for Camels was most convincing.

Certainly the average physician is busier today than ever before and is deserving of every bit of relaxation he can find in his day-by-day routine . . . a cigarette now and then if he likes. And the makers of Camels are glad to know that physicians find in Camels that extra margin of smoking pleasure that has made Camels such a favorite everywhere.



According to this recent nationwide survey:

More Doctors Smoke Camels

than any other cigarette



R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

ADVANTAGES OF ARMY CAREER FOR DOCTORS

(Continued from Page 180)

tors who will maintain the high standards which have prevailed during the war in the care of the sick and wounded because there are definite advantages for the professional man who elects to serve in the Army, according to General Kirk.

A professional career offering broader possibilities in a larger field than the practice of the average civilian doctor affords is open to the Regular Army Medical Corps Officers, General Kirk pointed out. The policy of The Surgeon General of making all general hospital centers for certain types of cases and specialty training gives the doctors in those centers exceptionally wide and varied experience.

The Army has been and is now conducting residency-type training which will allow and encourage doctors to advance in their professional qualifications. Opportunities for administrative and field training will also be continued.

It is the policy of The Surgeon General to arrange the training and assignments of Army doctors in a way to help them obtain board certification for specialties from recognized civilian specialty boards. Army fellowships, residencies and special courses are in operation to further this program designed to aid in advancing the personnel of the Medical Department from a professional standpoint. As facilities and opportunity permit, training in recognized civilian institutions will be expanded.

The security assured the Army doctor will appeal to many professional men, the General explained. There is regular income and regular promotion and also retirement pay, which amounts to 75% of base plus longevity pay for the doctor who has served 30 years or who has reached the statutory age limit. If a man is retired for physical disability at any time during his Army career, he will also receive 75% of his pay at time of retirement for the rest of his life. The Army doctor and his family are also eligible for medical care and hospitalization.

The opportunity to serve in foreign countries will appeal to those who are interested in travel. Wherever there are American forces overseas there will be members of the Medical Department to look after the health of the Army.

Under the new law, any doctor, physically and professionally qualified, who has been on active duty in the Army since Pearl Habor, and who is under forty-five years of age, is eligible for appointment in the Regular Army, unless he has been separated from the service under other than honorable conditions.

His grade will be determined by his age, within limits, or his length of service as a commissioned officer in the Army, whichever is the greater factor. No officer will be appointed in a grade higher than the one which he held in wartime.

The following table indicates the grades provided for Medical and also Dental and Veterinary officers selected for appointment, based on actual commissioned service or constructive service (age):

Actual Commissioned Service	*Constructive Service (Age)*	*Grade*
Less than 3 years	25 to 27 yrs. of age, inc.	1st Lieut.
3 or more but less than 12	28 to 36 yrs. of age, inc.	Captain
12 or more but less than 20	37 to 44 yrs. of age, inc.	Major

Medical Administrative and Sanitary Corps officers who are selected will be appointed in the Pharmacy Corps and should apply accordingly. Educational requirements for the Pharmacy Corps may be waived.

The Adjutant General will direct the applicant to a personnel center where he will be given a physical examination and a general survey test and will be interviewed by a board of officers.

Applications must reach the Adjutant General's Office, Washington 25, D. C., not later than March 10, 1946. A formal application made on WD AGO Form 62, 1 November 1945, will be required even if a statement of interest or other form of application has been submitted previously.

Application WD AGO Form 62 can be obtained at any Army installation or unit headquarters or upon written request to the Adjutant General's Office, War Department, Washington 25, D. C.

The applications should be in duplicate. A person on active duty should submit the application in duplicate through his immediate commander. Those not on active duty should apply direct to the Adjutant General, War Department, in Washington, D. C., Attention AGSO-R. Anyone outside the United States should send his application to the Commander of the Theater in which he is located.

NAVY PROGRAM ENDS AT MEDICAL SCHOOL

The naval V-12 program at the Wayne University College of Medicine terminated Saturday, December 22, when the 75 men then enrolled under the wartime schedule were relegated to inactive status.

Although they turned in their Navy uniforms for civilian clothes, it was emphasized that the men may be recalled to active duty with the U. S. Fleet should any of them be unable to continue medical courses either for financial or academic reasons. The V-12 program has been in operation at Wayne University for three years.

MALARIA RELAPSE RATE DECLINING

The hospital admission peak for malaria relapses in the United States was reached in February, 1945, with a total of approximately 6,000 cases, and has been steadily declining since that time, according to a recent announcement by the Army Medical Department.

During 1943, when men began to return from tropical theaters of operations in increasing numbers, the total number of hospital admissions for malaria relapse reached 5,275. By 1944 it had jumped to almost five times that number—28,150, and in the first six months of this year the total was 30,420.

It is believed, however, that the return of troops from malaria-ridden areas will not appreciably affect the downward trend of admissions, for a large proportion of original personnel already has been replaced and returned.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

Volume 45 February, 1946 Number 2

Clinical Manifestations of Rheumatic Fever

Determination of Rheumatic Activity

By Stanley Gibson, M.D.
Chicago, Illinois

This Rheumatic Fever Control Conference is one of the many evidences of the increasing interest which is being taken in the subject of rheumatic fever.

Rheumatic fever is a disease of numerous and varied manifestations. In many of the cases the diagnosis is unmistakable and could scarcely be missed by anyone who is at all familiar with the disease. On the other hand there are mild and atypical forms in which the diagnosis is made with difficulty or perhaps cannot be made at all. There are a number of symptoms and signs occurring in the course of rheumatic fever which are peculiar to this disease. There are others which, though present frequently in rheumatic fever, are found in other conditions and do not in themselves justify a positive diagnosis. I believe that there are five phenomena which alone or in combination are diagnostic of rheumatic fever if they appear in typical form. These are polyarthritis, chorea, carditis, rheumatic nodules, and annular erythema. I wish to discuss these briefly in turn.

Presented at the Michigan Rheumatc Fever Control Conference, sponsored by the Michigan State Medical Society and the Michigan Crippled Children Commission, at Detroit, Michigan, September 19-20, 1945.

Polyarthritis is the most frequent and is very often the first evidence of rheumatic fever. In the milder cases there are pain and tenderness in the joints, a number of joints being involved in rapid succession. In the severer cases there are redness and swelling in addition to the arthralgia. Even without treatment the persistence of symptoms in any one joint is likely to be of relatively short duration. Suppuration does not occur. Another feature which is important is the prompt response of pain, tenderness, redness, and swelling to the use of salicylates. Of course there are many other forms of arthritis which may easily be confused with rheumatic polyarthritis. One must consider actual bacterial invasion such as is present in streptococcic, gonococcic, or other acute infections. Perhaps the type of arthritis most difficult to differentiate is rheumatoid arthritis. Oftentimes the child must be observed for a considerable period before the differential diagnosis is certain. Pain in the region of the joints may also occur in syphilis, tuberculosis, leukemia, and sickle cell anemia. Hence one must be cautious in making a diagnosis of rheumatic fever on joint pains alone. However in the typical cases of fleeting pains which are severe and involve a number of joints with a prompt and dramatic response to salicylate therapy one can have a fair degree of confidence in the diagnosis on this basis alone. Furthermore if one can secure a history of an upper respiratory tract infection some two or three weeks preceding the appearance of the joint pains it lends weight to the diagnosis of a rheumatic invasion.

Chorea is regarded by most authorities as a definite rheumatic phenomenon. There are some who will disagree with this view, yet the extremely high proportion of children having chorea who sooner or later show other evidences of rheumatic

fever is proof of the close association. One must, however, be strict in his diagnosis of chorea. Not every child who has involuntary movements of his muscles is necessarily a victim of the disease. It is necessary to consider the complete picture. I feel that true chorea is a syndrome in which there is a definite beginning, with a continuance of symptoms over a period of weeks and months followed by complete recovery. In addition to the purposeless, involuntary movements of the muscles, the extremities, and the face, one must remember that there is an accompanying emotional instability which is a cardinal symptom. In fact it is often a more distressing feature of the picture than are the movements themselves. These patients are unhappy, quarrel with other members of the family, cry on slight or no provocation, and in general show a decided personality change. Chorea differs from other rheumatic manifestations in that in the uncomplicated cases there is no fever, no leukocytosis, and no change in the sedimentation rate. In other words, one is unable either by clinical or laboratory means to demonstrate the presence of infection. Yet microscopic studies have indicated that there are changes in the brain in chorea so that one may regard it as rheumatic brain disease. Perhaps it is because of its being restricted to small areas of the brain and the fact that it is a low-grade reaction that there is an absence of the usual signs of infection.

Heart Complications

Invasion of the heart itself is, of course, the central fact in any consideration of rheumatic fever because it is here that serious and permanent damage may take place. All the structures of the heart, myocardium, pericardium, and endocardium may be involved. The degree of myocardial involvement is not easy to assess, especially in the earlier stages of the disease. The presence of a to and fro pericardial friction rub is the one reliable sign of acute pericarditis. Clinical pericarditis, however, is found in only a small percentage of cases. Valvular damage is present in well nigh 100 per cent of the cases of rheumatic heart disease, and it is chiefly upon the signs produced by valvular damage that a positive diagnosis can be made. Inasmuch as the mitral valve is the one most frequently involved, one gives particular attention to the signs which result from insufficiency or narrowing of this valve. A soft, blowing systolic murmur occurring at the apex with transmission to the left in a child who has previously had a normal heart is strong evidence of involvement of the mitral valve. If, in addition, a mid-diastolic murmur is heard at the apex, the evidence is even more convincing. Finally, if after the process has gone on for months or years one hears a presystolic murmur over this area he can feel sure that permanent damage to the mitral valve has occurred. I know of no acquired condition other than rheumatic fever which produces this definite progression of signs in the mitral valve. In a fair percentage of cases the aortic valve is also involved. Aortic insufficiency is evidenced by a diastolic murmur usually soft and blowing in character beginning with the second sound and usually best heard at about the third left interspace along the sternal margin. Aortic stenosis with a harsh murmur in the first and second right interspaces may occur after a considerable period of time, but it is a late finding and is not often encountered in children. The typical findings of mitral and aortic damage in a child whose heart was previously normal can be considered definite evidence of rheumatic carditis. I do not wish to overemphasize the importance of murmurs. It is well known that the myocardial involvement is apt to be much more important than the injury to the valves and where we see children with very large hearts we feel that the enlargement results chiefly from myocardial rather than valvular injury. Yet in established rheumatic heart disease murmurs are rarely absent and the murmurs such as I have mentioned are important diagnostic aids. It is important that their timing, quality, and location be carefully noted as otherwise they may be confused with functional murmurs or those due to congenital heart disease.

Rheumatic nodules are among the most interesting and important of the rheumatic phenomena. They occur as rather firm, non-tender swellings chiefly at the elbows, knees, ankles, knuckles, along the spinous processes of the vertebrae, and in the scalp. Unless one searches for them they are apt to be missed. The arms and legs must be flexed to draw the skin tightly over the bony prominences at the elbows and knees in order to bring them into view. They occur almost always in conjunction with severe chronic rheumatic fever in which the heart practically always shows definite and often severe involvement. They are rarely seen in acute fulminating cases in which the total duration of the disease from onset to death is only a

few weeks. They are rarely seen in the milder cases in which there is little or no cardiac involvement. They are rarely a diagnostic aid inasmuch as other rheumatic phenomena have usually been in evidence for weeks or months before the rheumatic nodules appeared. They are, however, of prognostic importance inasmuch as they are associated with severe and long-drawn-out active rheumatic heart disease.

A final sign of rheumatic fever which is not usually emphasized and which is important only as an interesting diagnostic feature is the so-called annular erythema. This consists of a thin, pink, wavy line, usually roughly circular in outline, and varying in size from one to several centimeters in diameter. It is distinctly an erythema. There is no elevation of the skin. Within and without the erythematous area the skin is normal. There is no burning or itching. The most frequent location is on the trunk or proximal portion of the extremities. I have never seen it on the face. It is very evanescent in character, appearing and disappearing within the course of a few hours. It usually occurs in the milder rather than the severe forms of rheumatic fever. It is seen in only a small proportion of rheumatic patients but once exhibited in a given individual it is likely to recur at frequent intervals.

There are a number of manifestations which are frequent in the course of rheumatic fever but which are not limited to this condition. Abdominal pain occurs rather often in rheumatic fever and is likely to be a symptom of onset even before joint pains or other frank rheumatic findings are evident. Under such circumstances a diagnosis of appendicitis is usually made. I can recall at least two children on our service who had normal appendices removed at the onset of rheumatic fever. This finding is a very troublesome one inasmuch as a true appendicitis may occur in the rheumatic child and one is in danger of making a mistake on either horn of the dilemma. One can only say that a very careful physical examination with strict attention to point tenderness and localized rigidity must decide whether operation is to be done. Another frequent symptom is fever, usually of low-grade once the acute joint symptoms have subsided. Freedom from fever, however, does not necessarily mean freedom from infection because one sees constantly children with active rheumatic infection with a normal temperature. Precordial pain may occur but it is not usually an important diagnostic symptom. In my experience precordial pain occurs chiefly under two conditions: (1) when there is acute pericarditis; (2) in children with extremely large hearts where symptoms resembling those of angina pectoris may be present. Precordial pain is usually conspicuous by its absence in rheumatic heart disease. Nose bleeds are frequent in children with active rheumatic fever. This may, however, be the result of local pathology in the nose or of other diseases. Pulmonary symptoms sometimes suggestive of pneumonia may occur, but usually in conjunction with recognizable heart involvement. The laboratory findings include anemia, usually moderate in degree, leukocytosis, and an increase in the sedimentation rate. Among other minor manifestations are poor appetite, loss of weight, pallor, fatigue, and headache.

How is one to interpret these various signs and symptoms in relation to rheumatic fever? In the presence of some actual rheumatic phenomenon such as polyarthritis or heart disease, these findings merely serve to fit in to complete the clinical picture. I do not feel that any combination of these findings which I have just mentioned is sufficient to make a positive diagnosis of rheumatic fever. One of the most common diagnostic problems with which a pediatrician is confronted is that of the child who has a little fever, tires easily, is losing color, perhaps has a poor appetite with slight loss in weight together with some nondescript pains in his extremities and possibly a faint murmur over the heart.

When one reviews this group of symptoms he readily recognizes that disease entities other than rheumatic fever can match practically all of them. A good example is tuberculosis. Another is the prolongation of the active stage of an upper respiratory tract infection due to a focus of infection somewhere in the body. A fair number of children with such symptoms as those mentioned have sinus infection. It is necessary, therefore, to view these symptoms as confirmatory rather than as occupying an important place in the symptomatology of rheumatic fever. An unexplained fever or epistaxis or easy fatigability would readily raise the question of rheumatic activity in a child who had previously had an out and out rheumatic fever. On the other hand one would not be justified in making such a diagnosis if the symptoms were present for the first time.

At this point I wish to warn against the diagnosis of rheumatic fever, and particularly of rheumatic heart disease, on insufficient evidence. The great interest which is now being taken in this subject will cause all physicians to be increasingly alert to the possibilities of such a diagnosis and lead them in their enthusiasm to suspect it in instances where they might not otherwise have done so. We are all familiar with cases in which such a diagnosis has been made and in which subsequent events would indicate that it has been made in error. The laity has a justifiable fear of heart disease because they know of its ability to maim and to destroy. To mention to a mother that her child has a heart murmur even though in the same breath one states that the murmur is functional and of no significance is apt to cause her to leap to the conclusion that something terrible is going to happen. If one physician makes a positive diagnosis of heart disease which is refuted by half a dozen other physicians she still has the lurking fear that the one who first made the diagnosis is correct. I believe it is perfectly logical to raise the question of rheumatic fever and to state that the child must be kept under observation and that in the course of time a definite answer can be given. I have seen a number of instances in which both the parent and the child have practically become chronic invalids because of an injudicious remark concerning the heart by their physician. It is better to err on the opposite side and withhold a positive diagnosis until one is on firm ground.

The determination of activity of the rheumatic infection is one of the most difficult problems in connection with the entire subject of rheumatic fever. It is of first-rate importance because management is determined by the presence or absence of active infection. The presence of rheumatic polyarthritis is, of course, evidence that active infection is going on. The presence of rheumatic nodules is also an indication of active infection, particularly if new crops are appearing, although in some instances a few nodules may remain when there is no other sign to indicate activity. Annular erythema is also usually regarded as evidence of activity. In the presence of established heart disease one may not be able by auscultation of the heart to say whether active infection is present or not. Naturally, the appearance of a pericardial friction rub, the development of a new murmur, or a distinct change in murmurs already present may enable one to say that changes due to active mischief are occurring in the heart. More often than not the findings in the heart remain practically the same over considerable periods regardless of whether activity is present or has subsided. It is to the so-called minor phenomena which we have mentioned that one must turn for signs of activity. Unexplained fever is significant, although as I have already stated the absence of fever does not necessarily mean that convalescence has begun. Secondary anemia, leukocytosis, loss in weight, anorexia, nose bleed, and easy fatigability are in the proper setting indicative that active infection continues. All of these symptoms may subside, however, before the termination of the active process. Perhaps the one most dependable sign is the sedimentation rate. It is well known that it may remain rapid after all other manifestations have disappeared. It is usually looked upon as the one best criterion for determination of the absence or presence of rheumatic activity. It should not be forgotten, however, that the sedimentation rate may be normal in the presence of congestive heart failure. So far as I know there is no complete agreement as to the normal limits of variation of the sedimentation rate. I have seen a number of children who have done well following active rheumatic infection in whom the sedimentation rates were somewhat higher than the usually accepted standards. Moreover the technique is sufficiently exacting that one should not accept without mental reservation a sedimentation rate done by the newest intern on the service. It will also be found that the sedimentation rate may vary considerably from day to day. Too great dependence should not be placed on the result of a single test. As a matter of practical fact in discharging our rheumatic patients from the hospital ward we utilize a number of criteria. First of all, we are anxious to know that the patient has been free of fever for some time, that his appetite is good, that he is recovering from his anemia, that his white count is normal, that he is gaining in weight, and that he has that look of interest and alertness which indicates a state of well-being. Secondly, we wish to know that the sedimentation rate is at least within the upper limits of normal. And finally, I always ask the head nurse on the ward whether she thinks the child is able to go home. She is the one who observes him from morning

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Rheumatic Heart Disease

The Use of X-Ray in Diagnosis

By John F. Holt, M.D.
Ann Arbor, Michigan



ROENTGENOLOGY has played an increasingly important role in the study of cardiac abnormalities ever since Williams'[11] early observations made less than one year following Roentgen's momentous discovery in 1895. Important advances in conventional roentgenologic apparatus and technique, supplemented by the development of orthodiagraphy, teleradiography, laminagraphy, photofluorography, cineradiography, and contrast angiocardiography, have all served to place cardiac diagnosis upon a progressively more scientific basis. There is no question that as a direct result of these improvements, the roentgenologist has acquired added responsibility in the identification of various cardiovascular lesions. Without further delay, however, it should be emphasized that despite the significant advancement of roentgenology as a diagnostic agent, the time-honored clinical methods of investigation have not been materially altered. Careful correlation with clinical findings is necessary in nearly all instances where roentgen examination is employed. As to relative importance in cardiac diagnosis, it is generally agreed that, with few exceptions, roentgenology belongs in the fourth position, ranking well behind a carefully elicited clinical history, a thorough physical examination, and electrocardiography.

All of these generalities are applicable to rheumatic heart disease which is the type most frequently seen by the roentgenologist. Since all of the above-mentioned roentgenologic procedures have been employed at one time or another in the study of that disease, a brief description of each seems warranted.

From the Department of Roentgenology, University of Michigan, Ann Arbor.
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Fluoroscopy, which consists of the direct visualization of the shadow of the heart on the fluorescent screen, is of prime importance in cardiac diagnosis. By such procedure, the observer may choose the optimum degree of rotation in which to study the various cardiac chambers in different disease conditions. He may separate these salients to a considerable degree by discerning characteristic auricular and ventricular pulsations. Abnormal pulsations and changes in cardiac movement during different phases of respiration may be noted. The all-important relationship of the heart to its adjacent structures may be carefully studied. With justice it may be stated that no individual unskilled in fluoroscopy should attempt diagnosis of cardiac lesions by roentgenologic means.

Orthodiagraphy is a fluoroscopic method of determining heart size which eliminates distortion by the use of a non-divergent central x-ray beam. Using this perpendicular beam, a tracing of the cardiac silhouette is made and transferred either directly or indirectly to a sheet of paper which serves as a permanent record. In the hands of an experienced fluoroscopist, this method affords the most accurate measurements of heart size. But, as in any fluoroscopic procedure, the personal equation is an important factor and considerable variation may be found in the results of different observers. Another disadvantage is that special fluoroscopic equipment is required.

Distortion and magnification of the heart shadow due to the inevitable divergency of an ordinary x-ray beam may also be largely overcome by increasing the distance between the source of radiation and the heart to six feet or more. It is technically impracticable to operate a fluoroscope under such conditions, but films may be readily and rapidly exposed. Such films are called *teleoroentgenograms.* They constitute a more accurate record of the cardiac status, and show the relation of the heart to surrounding structures in greater detail. There is a tendency among technicians to expose teleoroentgenograms in full inspiration, giving a cardiac shadow which may be very misleading. If the exposure is made with the patient holding his breath in mid respiration, the resultant film will show a more accurate representation of both cardiac size and shape.

It should be obvious that a combination of orthodiagraphy and teleoroentgenography most closely

approach the ideal in the determination of heart size. What must not be forgotten is that, at best, this combination is merely an approximation. The roentgenologist's computations may be expressed in millimeters, but this is entirely a relative matter.

Kymography, a method of examination which by utilizing a moving grid of lead strips yields a graphic representation of cardiac movement, has been on the whole somewhat disappointing. In our hands it finds its greatest use in recording the improvement of cardiac pulsation following surgical treatment of chronic constrictive pericarditis.

Laminagraphy, or body section radiography, as it is frequently called, permits segmental examination of various portions of the thoracic cardiovascular structures. At first thought, such procedure appears to have great advantages but unfortunately the various portions of the heart and the blood within them produce identical x-ray shadows as far as density is concerned. Thus, very little information is gleaned from these roentgenographic sections of the heart that cannot be acquired by simpler methods.

Photographing the fluoroscopic image of the chest with an appropriate still camera for survey purposes, *photofluorography*, is a procedure which at the present time is riding the crest of a tremendous wave of popularity throughout the country. Such mass radiography of the heart and lungs gives us a splendid opportunity to observe first-hand the great variation in the size and shape of the normal heart, and as a result to better evaluate the abnormal.

Recording the fluoroscopic image of the heart with a moving picture camera is known as *cineradiography*. This method has been in its "incipient" stage for a good many years, but considerable progress has been made recently. We may reasonably expect early perfection of this diagnostic medium which should illustrate cardiac dynamics in a more detailed manner than has been previously possible by any other method.

In 1938, Robb and Steinberg[5] described a method of visualizing the various chambers of the heart and great vessels by peripheral intravenous injection of *contrast material* (70 per cent diodrast). While it is comforting to know that this truly significant achievement is available when other diagnostic measures fail, it should not be regarded as a simple procedure to be used indiscriminately.

Before proceeding to the practical application of these roentgenologic methods in evaluating the various manifestations of rheumatic heart disease, the following points should be clearly kept in mind:

1. The roentgenologist diagnoses disease of the heart by alterations in its size, shape, position, movements, and consistency of shadow from accepted normals which under all circumstances show wide variations.

2. If a patient is suspected of having heart disease, unequivocal x-ray evidence of cardiac enlargement serves as adequate proof of that suspicion. The converse is not true. Serious cardiac abnormalities may exist in a heart that is roentgenologically negative.

3. The most important contribution of roentgenology in cardiac diagnosis is the confirmatory evidence it supplies to clinical findings which are already apparent. On occasion, clinically unsuspected abnormality is discovered by x-ray methods, but the majority of such instances are due to initial oversight on the part of the referring physician.

Rheumatic Valvular Lesions

Mitral Valve.—The characteristic roentgenologic feature of mitral valve disease is enlargement of the left atrium. Sosman[7] states that this applies equally to mitral stenosis and mitral regurgitation, but the latter produces associated left ventricular enlargement, whereas in stenosis increased pressure in the pulmonary circulation produces enlargement of the right ventricle. Demonstration of the enlarged left atrium in mitral stenosis is second in importance only to the typical diastolic murmur[3], and fortunately this enlargement can be identified in the great majority of instances.

It cannot be emphasized too strongly that, as a rule, left atrial enlargement cannot be seen to best advantage in the conventional frontal projection of the heart. The normal left atrium is situated posteriorly, and when viewed in the sagittal plane only the auricular appendage can be seen along the left heart border. Much of the atrium is actually situated to the right of the mid line. When it enlarges it does so in a posterior direction so that it shows up to best advantage in the right anterior oblique or lateral projection, par-

ticularly when the degree of enlargement is slight. Rigler[4] has emphasized the fact that a dilated left atrium displaces the esophagus posteriorly and to the right so that a swallow of barium showing this displacement may assist in the diagnosis. As enlargement of the atrium continues the middle third of the normally air-containing posterior mediastinal space may be obscured and the main bronchi may become spread farther apart. Both of these signs are likewise best seen in the right anterior oblique position.

Viewing the heart from in front, one may observe four distinct convex curves along its left border. The uppermost prominence is that of the aortic arch which frequently appears hypoplastic. Real hypoplasia supposedly occurs when mitral disease is acquired in childhood; it is thought to be due to a decreased volume of blood from the left ventricle which in turn is due to the stenosed mitral valve. Sometimes the hypoplasia is apparent rather than real as the result of relative dilatation of the pulmonary artery which forms the second bulge directly beneath that of the aorta. The third convex curve is the border of the enlarged left auricle, and the lowermost is that of the left ventricle. These four prominences constitute so-called "mitralisation" of the heart, a term which is very popular but quite unreliable and generally unsatisfactory. Congenital heart disease, thyrotoxicosis, extensive pulmonary fibrosis and several other conditions may at times produce "mitralisation." The same configuration is even seen occasionally in certain individuals of asthenic habitus without any of the abnormalities listed above. Furthermore, in infants and young children slight rotation of the chest or changes in intrathoracic pressure due to crying may produce apparent broadening of the waist of the heart which might easily be mistaken for the changes in mitral disease. Great caution must be exercised in evaluating chest films in children or many false positive diagnoses of cardiac abnormality will be made.

A more important roentgen sign of mitral stenosis seen at times in the frontal view is a double convexity of the right heart border resulting from an overlapping of the right atrial shadow by the enlarged left atrium. The left atrial shadow is higher in position, although at times it may become so prominent as to form the entire right heart border. The explanation of this lies in the fact that the spine limits the posterior enlargement of the left atrium and as dilatation progresses the atrium somewhat paradoxically slides off into the right lung field. We have seen one patient in whom the right border of a tremendously enlarged left atrium actually extended to the right lateral chest wall.

Careful fluoroscopic search for calcification in the mitral valve should always be made since it is relatively common and, if found, represents conclusive evidence that stenosis is present. No special equipment is necessary but dark adaptation of the observer's eyes must be complete. This means that the fluoroscopist should spend at least twenty minutes in complete darkness before the examination is begun. The calcified valve appears as a dark, elliptical shadow with a characteristic dancing movement, the speed of which depends upon the heart rate. Once again the optimum position of the patient is the right anterior oblique.

Sosman[8] warns that calcification in the mitral valve must be differentiated from a calcified mitral annulus fibrosis which is purely a senile change analogous to arcus senilis. The calcified annulus is larger, more homogenous, and U or J-shaped in appearance.

Practically all cases of mitral stenosis eventually show some degree of pulmonary vascular congestion, the roentgenologic manifestations of which frequently are recognizable before clinical signs are apparent. The hyperemia is usually bilaterally symmetrical although exceptions are encountered. Care must be taken to differentiate pulmonary congestion from widespread fibrosis or pneumonitis.

Aortic Valve.—The roentgen findings in patients with aortic valvular disease are not nearly as conclusive as they are in cases of mitral stenosis. Much has been written about the so-called aortic configuration but this is certainly not diagnostic of either rheumatic aortic insufficiency or aortic stenosis, it being frequently encountered in both hypertensive and luetic heart disease.

In aortic insufficiency one may observe marked enlargement of the left ventricle and vigorous pulsation corresponding to the well-known water-hammer pulse. The aorta is more prominent than normal. Fortunately the clinical diagnosis of uncomplicated aortic insufficiency is relatively easy, and the roentgenologist is seldom called upon for diagnostic aid.

On the other hand, the clinical diagnosis of aortic stenosis is difficult according to the figures of Thompson and Levine.[9] These authors state that in general practice the diagnosis is made in only 40 per cent of the cases and by experienced cardiologists in only 53 per cent. Thus the field for roentgenologic help is wide open, but unfortunately there is little about the size, shape, and action of these hearts with aortic stenosis that can be considered characteristic. Points favoring a diagnosis of aortic stenosis are only slight enlargement of the left ventricle and less forcible but more sustained pulsation of both ventricle and aorta than is the case in aortic insufficiency.

One really important roentgen finding in aortic stenosis is calcification of the valve. Sosman[7] declares that the great majority of stenotic aortic valves seen at autopsy contain large calcium deposits. He claims further that most of these concretions (90 per cent) are demonstrable fluoroscopically and, if found, invariably denote stenosis of rheumatic etiology. To differentiate aortic from mitral valve calcification fluoroscopically, the patient is turned into the left anterior oblique position. Under such circumstances the mitral valve is in the posterior third of the heart shadow and the aortic valve is in the middle third, closer to the base and higher in position.

Combined Mitral and Aortic Valves.—A combination of mitral stenosis and aortic insufficiency is more common in rheumatic heart disease than either valvular abnormality by itself. It is in these combined lesions that we see unusually large hearts, the classical cor bovinum. Since the mitral lesion usually develops first, the roentgenographic appearance of the heart is predominantly that of mitral disease with broadening of the waist of the heart and posterior enlargement of the left atrium. The aortic knob, however, is broad rather than diminutive and the left ventricle may be extremely large. Frequently the shape of the heart is not typical and a definite roentgenologic diagnosis is not possible.

Tricuspid and Pulmonic Valves. — Rheumatic lesions of the tricuspid and pulmonic valves occur almost invariably in conjunction with mitral or aortic lesions. The clinical interpretation of these right-sided valvular lesions is notoriously inaccurate, and roentgenology has very little to offer in the way of precise diagnostic signs.

Pericardial Lesions

In acute rheumatic pericarditis, there are usually no recognizable roentgen signs. Pericardial effusion, however, may occur relatively early in the disease process and it is generally under such conditions that roentgenologic confirmation is sought.

It has been estimated that at least 250 c.c. of fluid must be present in the pericardial sac of an adult before radiographic detection is possible.[6] In children, of course, the critical level is considerably lower, being closer to 50 c.c.

The earliest recognizable roentgen sign of pericardial effusion is distention of the posterior inferior recess due to gravitation of the fluid to the base of the pericardial sac. This finding is observed only in a lateral view of the chest. As fluid accumulates the cardiac silhouette may show rapid increase in size in all projections, a most valuable finding that clearly indicates the need of frequent interval examinations. Children in particular are prone to develop sizable rheumatic pericardial effusions which may be absorbed as rapidly as they appear.

Depending largely upon the amount of pericardial fluid present, the frontal view of the heart may show it to be either triangular or globular in shape. If the patient is placed in a prone position with the head lowered, the effusion will sometimes shift superiorly producing visible broadening of the waist of the heart. Pulsations will be uniformly diminished or entirely imperceptible.

The old idea that the lateral cardiophrenic angles lose their acuteness in pericardial effusion has been largely disproved by roentgen methods. Only when the diaphragm is abnormally high in position are obtuse cardiophrenic angles observed.

It is apparent that x-ray examination may be extremely helpful in the diagnosis of pericarditis with effusion but it is far from infallible. A markedly dilated heart may simulate all of the findings described above and make differentiation impossible unless exploratory puncture is employed.

White[10] maintains that he has never encountered a case of chronic constrictive pericarditis of rheumatic etiology but, as Levine[2] points out, a great many of these cases remain unclassified and there is reason to believe that rheumatic fever may prove to be the origin of at least some of them. The condition is relatively uncommon, but since it is one of the few types of heart disease which can

be helped surgically we should be on the lookout for it at all times.

Although the clinical findings in constrictive pericarditis are usually diagnostic, roentgenologic examination is always indicated when surgery is contemplated. The heart is frequently found to be strikingly triangular in shape and relatively small. The aortic knob is either absent or flattened.[1] Fluoroscopy is most valuable, showing diminished pulsations over the portions of the heart involved and limitation of lateral shift of the heart with changes in position of the patient.

Demonstrable calcification in the pericardium is a pathognomonic sign of adhesive pericarditis. It can be found in approximately 50 per cent of cases, but its presence does not always denote constriction of the heart. Heavily exposed lateral and oblique films usually show the calcium to best advantage.

Summary

An attempt has been made to show that roentgenology is a valuable adjunct to other well-established methods in the diagnosis of rheumatic heart disease. Demonstrating a selectively enlarged left auricle is a most reliable sign in mitral disease, and finding calcification in the aortic valve is virtually diagnostic of stenosis of that structure. Valuable confirmatory evidence of other valvular lesions and certain forms of pericarditis may also be obtained by careful roentgen examination.

On the other hand, a great many instances of rheumatic valvular disease of all types produce no characteristic x-ray appearance, and at times it is impossible to differentiate pericardial effusion from pronounced cardiac dilatation. Furthermore, the normal thoracic cardiovascular shadow is subject to such individual variation, especially in children, that not infrequently cardiac abnormalities may be very closely simulated.

If we thoroughly appreciate the true value, and particularly the distinct limitations of roentgen methods in the recognition of rheumatic heart lesions, case-finding will be facilitated and many of the false positive diagnoses which we have reason to fear will be averted.

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CLINICAL MANIFESTATIONS OF RHEUMATIC FEVER

(Continued from Page 196)

until night. She knows of his eating habits, of his general behavior, and of his small complaints which the attending physician who has spent only a short time with the child is never able to evaluate.

There are a number of cases which after careful evaluation of all of the criteria we possess still leave us in doubt. We feel that under such circumstances conservatism is the only proper course to follow. A few more weeks or months in bed is not of grave consequence in the life of a child. To allow him up too soon when activity may increase damage to the heart is a serious mistake.

Summary

1. The phenomena which are an integral part of rheumatic fever consist of polyarthritis, chorea, heart disease, rheumatic nodules, and annular erythema.

2. There are many phenomena associated with rheumatic fever but which are not necessarily diagnostic, such as fever, pallor, poor appetite, loss of weight, easy fatigability, abdominal pain, precordial pain, nose bleeds, anemia, leukocytosis, and increased sedimentation rate.

3. Brief mention has been made of the symptoms and signs which determine activity of the rheumatic infection.

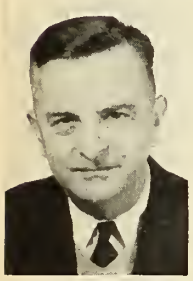
Arizona, Colorado, New Mexico, and Utah, are the only four states of the Union, every one of which touches the other.

Chorea

By Joseph A. Johnston, M.D.

Pediatrician-in-Chief, Henry Ford Hospital

Detroit, Michigan



THE INCLUSION of chorea in the rheumatic syndrome has been questioned largely because of the relatively low incidence of a complicating carditis.[1] The conflicting evidence is well reviewed by Jones and Bland[2] who present their own experience with nearly 500 cases followed over a significantly long period of time and compare them with about an equal number of patients with manifestations of rheumatic fever other than chorea. I can do no better than quote their conclusions with which most of us agree:

"Over . . . eight years, 72 per cent of patients with chorea exhibited other manifestations of rheumatic fever, while in 28 per cent only chorea was found. The incidence of rheumatic heart disease in the groups of patients studied was 86 per cent in the group with rheumatic fever without chorea as compared with 54 per cent with chorea. When the group of patients with chorea were further analyzed into (1) those with chorea and other manifestations of rheumatic fever, and (2) those with chorea but no other manifestations of rheumatic fever—(so-called "pure chorea"), the incidence was found to be 73 per cent and 3 per cent respectively. Therefore, chorea is considered to be a mild manifestation of rheumatic fever and in itself not especially conducive to the development of heart disease."

Chorea occurring alone, then, carries with it a small chance of a complicating carditis, though in the experience of Sutton[3] and in our series of seventy cases, the incidence was higher than that of the Boston group (20 per cent in the New York series, and 10 per cent in ours). In Sutton's series the child who began his career with chorea ran a 50 per cent chance of developing some other manifestation of the rheumatic syndrome.

Our experience with this condition derives from two different types of material. Our first four years' training covered experience in the dispensaries of hospitals in New Haven, Boston and St. Louis, exclusively charity patients. For nearly twenty years since that time, we have worked in an active clinic, drawing its material largely from the middle economic stratum. There have been about a quarter million visits to this outpatient clinic in that time. Some of these are single visits with no follow-up; a larger percentage represent patients born in the hospital and supervised from birth on. In the twenty years there have been seventy-one cases of chorea seen. We have never seen a case in a child born in the clinic and followed regularly from birth. This point I think is significant and I shall refer to it later.

Of the seventy-one cases seen, forty-two had no joint manifestations of rheumatic fever; seven (10 per cent of the total number) have developed carditis without joint manifestations. Of those showing joint disturbances, in addition to their chorea, 80 per cent showed evidence of carditis also.

Differential Diagnosis

The clinical picture of chorea is so bizarre that there would seem little likelihood of confusing it with anything else, and I think this is usually true. Well developed, the picture may be described as an uncontrollable, purposeless athetosis. Occasionally, mild cases pose the problem of differentiation from habit spasm and tics. Involvement may at times be slight enough to escape detection for a long time. One youngster sent from a private school must have had trouble for months before his teachers detected awkwardness in his writing, because he said that during that time he had "lost his stuff" on the pitching mound and lacked control. It is just this sort of co-ordinated movement that fails first. Awkwardness in the handling of a fork or a pencil, involving as these acts do the synchronous movement of several muscles, may first call attention to the difficulty. With the problem in mind, I usually ask the child to shake hands; his grip is unevenly sustained. I have him write his name in the record and here a lack of control may be very evident. Asked to smile, his response is abrupt, but equally abruptly he may resume a masklike expression. Asked to show his tongue, he may bite it in attempting to control it. Patients with well-developed chorea seldom talk. A certain percentage of our cases have shown definite signs of increased intracranial pressure with fulness of the retinal vessels and a bradycardia. One

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case showed marked signs of meningeal irritation with a definitely increased pressure in the spinal fluid, no increase in cells but an elevated sugar. The choreiform movement did not appear until his second day in the hospital. Incidentally, in this child there unfolded the complete rheumatic picture: polyarthritis, erythema nodosum and multiforme and a pancarditis. A sedimentation rate may be helpful in differentiating the mild case from a habit spasm, but we agree with Sutton that it may frequently be normal in true chorea.

Treatment

In a disease as variable in severity and duration as chorea, and, in its pure form, carrying with it so small a chance of a complicating carditis, the results of treatment are difficult to evaluate. So striking, however, was the reduction in complications in Sutton and Dodge's follow-up of patients treated with fever induced by triple typhoid vaccine that we have felt it a duty to recommend this to all suitable cases. We have not used it when there was evidence of active carditis. Of twenty-five who received it, five developed carditis, but all of these had joint manifestations of rheumatic fever as well. In a few cases showing evidence of increased intracranial pressure: papilloedema and bradycardia, hypertonic glucose has seemed to have value. The Kettering hypertherm was tried but discontinued when it seemed to represent an exhausting experience, physically and emotionally. We have followed the detailed technique outlined by Sutton and Dodge except that we have given treatments on alternate days rather than successive ones.

Prophylaxis

In any infectious disease process there are always at least two variables, the seed and the soil. The story of the activation of latent tuberculosis by nutritional deficiency is an old one and is being re-told in Europe at the present time. One of the most striking examples occurred in Denmark following the first world war. Denmark had shared the marked rise in the incidence of this disease with the rest of the countries who were ill fed, but when the removal of her dairy products by Germany was suddenly prevented, an almost dramatic fall in rate followed.

The repeatedly noted unequal distribution of the rheumatic state in the various economic classes, in spite of the almost universal presence of the offending streptococcus, the increase in the prepuberty period when the demands of rapid growth are so commonly not met, with an equally striking fall when the growth process has ceased—all of these have led to a more critical evaluation of the soil. A failure to influence significantly the developed rheumatic state by alterations in diet does not appear to us to be particularly pertinent. A similar failure was noted with well-developed tuberculosis.

In Marshall's series of 180 cases only eight cases of rheumatism and carditis occurred in his upper economic group, and one of chorea and carditis. Warner's careful dietary study showed a low intake of milk in the affected group . . . "perhaps the most striking fact suggesting that an increase in animal fat in the form of fresh milk and butter may be of prophylactic value is furnished by the figures from Christ's Hospital where the incidence of rheumatism was reduced to less than a third corresponding to a rise in the animal fat consumption from 50.6 to 103.6 gm., due largely to an increase in the rations of milk and butter." Of course, this carries with it a doubling of the calcium intake. Warner noted that concentrates of vitamins A and D did not accomplish the same thing. In Coburn and Moore's study, the poor diets were not low in a single component but in many, notably protein, calcium, iron and vitamin A.

My own experience, quoted above, of failing to note chorea in any child whose nutrition has been supervised from birth, and of seeing an abortive form of the rheumatic stage in general in a small percentage of the entire group has made me feel that the contribution which the medical profession has to make to this whole problem may be the largest in the prevention of malnutrition. This is a problem in which dietetics *per se* plays only a fractional role. In the lower strata the problem is one of economics. In the middle and upper strata, it is in part one of our imperfect knowledge of nutritional requirements, but in our opinion, it is more largely a medical one. In a study of 100 children, whom I considered poorly nourished, who had come from good homes, the diet offered seemed to play a role in less than 5 per cent; in the others the highest percentage presented some condition interfering with the utilization of food, and high on the list was the in-

fected tonsil. I hold no brief for tonsillectomy as a specific help in the rheumatic state and agree with Wilson whose analysis of over 1800 cases from the literature led her to this statement: "Evidence which is available does not lend support to the view that rheumatic fever *per se* is an indication for the removal of tonsils . . . it is probable that the value of tonsillectomy in rheumatic children is proportionate to its influence on the general health of the child. The criteria for tonsillectomy in such children should not differ from those followed for tonsillectomy in the non-rheumatic child." One of those criteria on which we rely most is the occurrence of malnutrition in a child being offered an adequate diet and showing a persistent cervical adenitis. We were able to study the nitrogen balance on a group of such children before and after tonsillectomy. On an intake of protein as high as we could get the child to take, the retention of nitrogen rose from 0.06 gm. per day before to 1.52 gm. per day after the procedure. This type of defect is definitely not detected by dietary surveys. In the calcium field, we feel that neither the need for vitamin D nor the amounts of calcium necessary for growth are appreciated in the child approaching puberty. In the twelve-year-old girl, amounts of calcium just short of 1.3 grams without added vitamin D actually gave negative balances at a period of growth when normally as much as 500 mg. a day may be stored. Nor do we feel that there is a general appreciation of the high protein requirement of the adolescent. Measuring this, we found that consistently positive nitrogen balances were obtained only when 15 per cent of an otherwise adequate caloric intake was derived from protein. We found further that the child's appetite for it was a good guide to the amount; this is important when one hears so frequently from mothers the statement that "of course I don't let him have too much meat." We could not persuade children to take too much. Ninety grams of protein (15 per cent of 2600 calories) would mean the protein from a quart of milk, two eggs, a serving of cheese and two chops, or their equivalent. In one study it was evident that the father, whose requirement is negligible, might obtain that much but not his child. Another item deserving equal attention is the influence on retention of various glandular abnormalities. In the time allotted, I merely mention them to point out that they represent factors influencing utilization rather than intake, and therefore are not included in assessments which assume that an adequate diet implies adequate nutrition.

I mention these as a few of the things affecting normal nutrition which in turn may condition the development of the rheumatic state.

Summary

We feel that chorea is a mild manifestation of the rheumatic state; that uncomplicated by joint manifestations, the likelihood of carditis is small. We feel that the treatment of the active state at present is best accomplished with fever therapy induced by triple typhoid vaccine. We feel that its development is largely conditioned by a poor nutritional background, and that our chief contribution as physicians lies in our insuring normal nutrition, not only by intelligent provision of the requirements for growth, but also by a careful exclusion of those things which interfere with the utilization of food.

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The Influence of Light upon the Pituitary Gland and Its Functions

By Robert C. Moehlig, M.D.
Detroit, Michigan

ENDOCRINOLOGY CAN be related to almost anything, and since this brief paper has to do with light and the pituitary gland, I quote from the Bible.

1. In the beginning God created the heaven and the earth,
2. And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.
3. And God said, "Let there be light," and there was light,
4. And God saw the light, that it was good; and God divided the light from the darkness.
5. And God called the light Day, and the darkness He called Night.

Now if you will bear with me just a little longer before getting into the text, I wish to quote from Langdon Smith's "Evolution."

"When you were a tadpole and I was a fish
In the Paleozoic time,
And side by side on the ebbing tide
We sprawled through the ooze and slime
Or skittered with many a caudal flip
Through the depths of the Cambrian fen,
My heart was rife with the joy of life,
For I loved you even then.

Mindless we lived and mindless we loved
And mindless at last we died;
And deep in the rift of the Caradoc drift,
We slumbered side by side.
The world turned on the lathe of time,
The hot hands heaved amain,
Till we caught our breath from the womb of death
And crept into light again.

We were amphibians, scaled and tailed,
And drab as a dead man's hand;
We coiled at ease 'neath the dripping trees
Or tailed through the wind and sand.
Croaking and blind, with our three-clawed feet,
Writing a language dumb,
With never a spark in the empty dark
To hint at a life to come.
And that was a million years ago
In a time that no man knows;
Yet here tonight in the mellow light
We sit at Delmonico's.

Then as we linger at luncheon here
Oe'r many a dainty dish,
Let us drink anew to the time when you
Were a tadpole and I was a fish."

From the Department of Internal Medicine Harper Hospital.
Read before the Detroit Academy of Medicine, November, 1943.

The beneficial influence of sunshine was recognized long ago by ancients and was incorporated into rites of sun worship by many tribes both ancient and modern. Haeckel[8] in his "Riddle of the Universe" was of the opinion that sun worship was a more logical form of religion than any other. The multitude of uses the sun rays have been put to are well known. Science and specifically medical science has made great use of the sun rays for their therapeutic benefits.

Not a great deal is known, however, as to how this modality achieves the influences and benefits which it does. This brief presentation deals with the influence of light on the pituitary gland and its functions. Both American and European investigators have studied the varying hormonal content of this gland as influenced by light and darkness. It has been known for sometime that if the posterior lobe of the frog pituitary is removed, the animal becomes silvery white and the restoration of its normal color is achieved by the administration of posterior lobe extract. It has been shown that the pars intermedia of the pituitary contains the melanophore stimulating hormone. The frog is unable to undergo the normal color changes adapted to its environment when either the eyes or the pituitary gland are removed. There is, therefore, a physiological, chemical and anatomical connection between the eyes and the pituitary. The anatomical connection has been shown by Pines[11] and Greving.[7] They discovered the tractus hypophyseus-supraopticus. This tract establishes a direct connection between the optic nerve, the nucleus supraopticus and the pituitary. Both cold and warm blooded animals possess this tract. Greving has expressed the opinion that in cold blooded animals the regulation of color changes is a function of this tract.

Jores[9] showed that the melanophore changes in the frog are abolished if either the eyes or the pituitary is removed. He found that the blood and the eye of rabbits contained increased amounts of melanophore stimulating hormone during periods of darkness but that the amount was decreased in the pituitary. Darkness leads to discharge into the blood stream, light produces a storage or appearance in the gland. If frogs are blinded and their optic nerves not stimulated, the animals behave like those in the dark, but if the optic nerves are stimulated electrically (sensation-like light) or directly by light, the animals act

like lighted ones. Rodenwald[5] showed that the effects of light increases from long-waved red to short-waved blue.[9] Jores found that the water-soluble hormone of frogs and mice increased in their pituitaries in light rather than in darkness, but in an inactive form. In guinea pigs the vasopressor and uterine-stimulating factors of the pituitary are doubled or trebled by darkness, or by covering the animal's eyes. So, while melanophore hormone in its active phase decreases in the dark, the anti-diuretic, blood pressure-raising and uterine-stimulating hormones of the posterior lobe increase. Jores was of the opinion that the vasopressor hormone is the inactive phase of the melanophore hormone and that its large amount at night causes the greater number of births at night than in the daytime.

Certain clinical problems may find an explanation in the varying hormonal content of the pituitary during daylight and darkness. Attention is called to the fact that there is a nervous connection between the posterior pituitary and hypothalamus. The functions of the latter have been shown to be many and varied. Some of these are temperature regulation, variations in emotions, an influence on blood sugar, water and chloride regulation, nervous influence on gastro-intestinal and cardiac regulation, fat metabolism, sleep and several others. The hypophyseal-hypothalamic system plus the optic tract have close physiological and anatomical connections. As has been stated, these systems therefore, are influenced by light and darkness.

Of interest in this connection is the cyclic variation during the twenty-four hour period of temperature, concentration and amount of urine, besides other conditions such as the blood sugar content. Jores[9] made a study of the pituitary and its varying hormonal content as influenced by light and darkness and applied the facts to cyclic variation of the twenty-four hour metabolism and functions. He delves into the plant world to find substantiation of his work. For example, he calls attention to the opening and closing of certain flowers such as the "four o'clock." The opening and closing of the petals was so precise that one could set his watch by this mechanism. Many plants open and close during the twenty-four hour period so that one can say, like humans, that they have a sleeping period.

The most impressive phenomenon of the cyclic twenty-four hour period is, perhaps, sleep. Customarily, this is done at night. During sleep there is a shifting of the blood toward the acid side and an increased excretion of phosphate in the urine. The rhythm of temperature stands in direct relation with the utilization of oxygen as well as the excretion of carbon dioxide. The maximum exchange for these substances is in the late afternoon, the minimum in the early morning hours. The maximum and minimum variations produce rhythmic changes in the pulse and blood pressure. Also the cell content of the blood, particularly the leukocytes, vary during the day. Forsgren and his pupils found important changes in the liver during different times of the twenty-four hour period.[9] They found two distinct cycles—during the first period glycogen is stored, and in the second, bile is produced. The first cycle began at 2 o'clock and the second at "14 o'clock." Likewise the concentration of urine and its activity varied. In the early morning hours (2 to 4 o'clock), the minimum of nitrogen is excreted and in the forenoon from 10 to 12 o'clock, the maximum is excreted. This is supposedly due to a rhythmic change in the vegetative nervous system as well as to the activity of the endocrine glands. A close relationship exists between the adrenal glands and the sympathetic system and between the pituitary and parsympathetic system.

The causes of the cyclic variations in the bodily function are many, such as exercise, activity, eating, rest and sleep. These are unquestionably important factors that influence the daily rhythm but are not the only ones. This has been shown in individuals who reversed the customary way of living, that is, slept during the day and were awake at night. Neither the temperature cycle nor the urine excretion was disturbed by this change. The individuals undergoing the experiment had been living under these conditions for eight years.

It is believed that this twenty-four-hour cyclic periodicity is the cause and not the result of mankind's schedule of life.

Stoppel undertook an expedition to the land of the midnight sun in order to see if the movements of flower petals would open and close as in the temperate zone.[9] When the flowers were placed in the cellar they no longer went through the cycle but when a sheet which had been exposed to the sun was taken into the cellar, the cycle was resumed.

Bissonnette[1] said that there is increasing evidence of the induction of physiologic and cytologic changes in the pituitary gland by nervous excitation and some evidence for such changes in response to modified exposures to light. He found at the crest of sexual activity vacuoles in both the basophils and the eosinophils of the anterior lobe like those in "castration" cells. The results suggested that one of these types of cell secretes a hormone controlling the interstitial cells of the testis and the other a hormone stimulating the germ cells. Others, however, using different animals, have found a seasonal cycle of the anterior lobe.

In connection with the latter statement it is interesting to note the hibernation of animals.

Cushing and Goetsch[3] advanced the hypothesis of the seasonal nature of hibernation due to polyglandular inactivity as the etiologic factor. Recently Foster, Foster, and Meyer[5] in reviewing the influence of the endocrine glands on hibernation, concluded that their findings suggested inactivity of the pituitary gland as the primary factor responsible for the phenomena of hibernation.

Zondek and Bier[12] said that animals can be brought out of their hibernating state by placing them in artificial light and heat. Pregnancy is at a standstill during the hibernating period of the bat but proceeds normally when the animal is placed in artificial light and heat.

It is well established that during the hibernating state of animals the chromophobes of the pituitary are hyperplastic. This state is comparable to the colloid, or resting state of the thyroid gland associated with myxedema or hypothyroidism. It is my opinion that the ordinary type of Fröhlich's syndrome is due to hyperplasia of the chromophobes. In animals when normal hibernation ends because of cosmic or other influences, the hyperplasia of the chromophobes is replaced by hyperplasia of the chromophils, and the animal goes into estrus, with consequent metabolic and cellular activity.

The cyclic variation of symptoms of ulcer suggests that the season of the year may influence the hypothalamic-hypophysial system. This would tend to bear out Cushing's neurogenic hypothesis[2] of peptic ulcer as due to a disturbance in the interbrain area, since the rhythmic variation of endocrine function is not unlikely. His clinical experience with tumors of the midbrain area associated with peptic ulcer is suggestive. Furthermore, the beneficial effect of sunshine in certain diseases makes it not unlikely that the mechanism operates via the hypothalamic-hypophysial system. The influence of the pituitary gland on the skeletal system suggests that activation of this gland by sunshine may be the answer as to why this form of therapy benefits rickets and other allied disorders.

It is not within our province to discuss the close association between sunshine, vitamins and the hormones, but a physiologic relation, especially in conjunction with ocular pigmentary disturbances, such as xerophthalmia and retinitis pigmentosa is obvious.

The rhythmic cycle of pituitary cytologic changes has also been found by Zahl, who noted that the acidophils in frogs were in greatest number and with the most abundant granules and fuchsinophil droplets in spring and early summer.[1] They were less numerous in late summer and increased gradually in autumn and winter, to discharge again in spring.

Florentin and Stutinsky[4] found that when frogs were kept in a dark room the anterior lobe of the pituitary gland soon lost its chromophobes and that only a few basophils and many acidophils remained. The pituitary gland was in a state of arrested function and showed the effects of lack of photopituitary reflexes.

Bissonnette, in his conclusions, stated:

> All of the above studies show effects of light and darkness, and even of specific wave-lengths of light on some animals, mediated by the eyes, optic nerves, and pituitary and accompanied by cytological and physiological changes in the gland, and in the pituitary activity. These types of changes vary in different species, often in correlation with changes induced by other factors in the environment.
>
> We require much further study of these photopituitary reactions in many more animals before we can arrive at any very broad generalizations. But we already know that in many cases the daily period of light, its intensity, and its wave-length control and modify pituitary activity.

It is most reasonable to suppose, therefore, that girls in the tropics would menstruate and mature earlier than those in temperate zones.

In ornithology, studies showing the variation in the intensity of light, wave-length of light, and alteration of the daily periods of light influences

the migration of birds by cellular changes in the pituitary.*

Changes in the relative activity and size of the sex-glands and secondary sexual organs are assumed to be evidence of changes in the anterior pituitary.

Juncos (American finch or snow-bird), crows and canaries were studied by Prof. Rowan of Edmonton, Canada.[1] He was interested in the relation of migration to change in length of daily periods of exposure to light. He was able to control and modify the time of the year at which the birds become sexually active by increasing or decreasing their daily periods of exposure to light by adding electric light after nightfall or reducing it. He obtained sexual activity in these birds at any desired time of the year, even in spite of temperatures as low as minus 50°F.

Bissonnette experimented on starlings, field mice and ferrets. In starlings, sexual activity was induced in Autumn, Winter, or Spring by increasing the daily periods of exposure to light, and regression by decreasing it. Rate of acceleration of sexual activity varied with luminous intensity up to an optimum; more intense light gave a greater effect than less intense. But light could be too intense for greatest acceleration. Wave-length of light was also a factor; long-waved red light was most stimulating, perhaps that is where the red light originated, to indicate a sporting house. Shorter-waved green and blue were not activating. If anything, they appeared to be slightly inhibitory as judged by size and condition of the sex glands in comparison with those of animals without added lighting. Improper food was a limiting factor, since lack of vitamins, proteins or fats prevented even very stimulating red light from inducing more than very slight activation in a considerable time. Even light after a time will lose its effectiveness and the animals become refractory to the stimulus of light and regression sets in just as it does in many animals become refractory during long continued injections of gonadotropic hormones from the anterior pituitary.

All sexual cycles in animals cease following hypophysectomy and increased lighting fails to induce any sexually stimulating effect. The eyes are the normal receptors for pituitary stimulation by light but in the absence of eyes in the duck and frog, at least the recently cut optic nerve endings may be directly stimulated by light and lead to increased pituitary stimulation of sexual or coloration activity; or in the duck, the pituitary itself may be stimulated directly by light directed upon it and stimulate the sex organs to activity.

In the ferret, severance of the optic nerves frees the animal from the photic stimulus to sexual activity, and the animals have an inherent sexual cycle, independent of seasonal light changes.

In some animals the seasonal shedding of hair is also related to seasonal light cycle rather than to temperature. Hypophysectomy leads to loss of this marked seasonal moult and severance of the optic nerves dissociated it from the seasonal light cycle in ferrets along with the sexual cycle. Many animals are stimulated to sexual activity by increasing illumination, some by its decrease, and some are not sexually photo-periodic at all or very slightly so.

Dr. Cook, apparently the same one who came into disrepute, reported in 1894, on the basis of the Peary Expedition, that the Northern Eskimo women do not menstruate or have sexual cycles in the long winter night. The men of the expedition also undergo a certain amount of lassitude and lack of sexual interest, which is peculiar when you know the reputation of sailors. Of course, this report coming from Dr. Cook may not be reliable, although at the other extreme of the earth, in Patagonia, in Southern South America, Havelock Ellis stated that the women of this country show a cessation of sexual activity in the winter. This paragraph is in substance a quotation of Bissonnette.

There are of course many other applications of light on human activity and mental moods, since the pituitary and the hypothalamus have a direct nervous connection. It may be cited for instance that the irritability and moodiness of women at the time of menstruation is understood by the pituitary-hypothalamic changes. Then, too, the involutional melancholia may have its explanation in the changes which this area undergoes at the menopause. Emotional upsets, worry and other nervous factors no doubt affect this area and by this the sexual cycle.

If one grants that the pituitary gland is related to the formation of pigment, then the activity of the melanophore hormone of the Negro would, pari passu, be greater than that of the Caucasian.

*The thoughts expressed here in regard to birds and animals are those of Bissonnette, upon whose work I have drawn freely.

The Negro, at one time, probably possessed a very active pituitary gland. Even today this seems to be true. Freeman,[6] for instance, studied the relation of the weight of the whole pituitary gland of the male to weight, stature and race. He said that the weight of the pituitary gland is better correlated with body-weight than with stature and that the pituitary gland of the Negro is heavier than that of the Caucasian if the weights of the pituitary glands of persons of the same sex are compared.

For some time, I have stressed that the pituitary gland has a selective action on mesodermal tissues. If this is true, then the heavier pituitary gland of the Negro would by analogy produce certain peculiarities in the mesoderm of the Negro that would make this layer and its derivatives unique when compared with those in the white race. Details of this have been given elsewhere.

Originally, the Negro possessed a well-developed mesoderm, and the ectodermal structures, such as the nervous system, were in comparison less developed.

The mesoderm was necessary for the development of muscular strength, the skeletal system, immunity and procreative powers. The Negro race is phylogenetically a closer approach to primitive man than the white race. Of particular importance is the fact that a white person with acromegaly takes on the physical characteristics of the Negro. The white man reverts to the primitive type. Keith said:[10]

"I came to the conclusion then, which prolonged observation has gone to confirm, that the cranial and facial features of primitive man and those of acromegalic men and women are of the same nature, only in primitive man they were produced by a normal or physiological action, whereas in the acromegalic they are the result of an abnormal or pathological action."

Furthermore, he added:

"There still lurks in the body of modern man the machinery which fashioned the ample features of Rhodesian man and which can be awakened under conditions of disease. It is the same machinery which determines the more exaggerated degree of bestial strength seen in the face of the gorilla."

Peculiarly enough, but readily understandable, is the fact that the hyperpituitary states, acromegaly and the pituitary basophilism of Cushing, are found almost exclusively in the brunette. Dark-complexioned females with hirsutism are more apt to have menstrual disturbances than the blond, and the latter more apt to suffer from sunburn.

As previously stated, the mesodermal layer of the Negro has certain peculiarities as compared to the white person. It will be noted that when disease attacks the Negro, it most frequently does so in the mesoderm, whereas the ectoderm is relatively immune.

We cannot go into any detail or statistical study which proves this, but even a cursory examination will show that the incidence of disease of mesodermal tissues is usually high for the Negro.

It is a generally accepted fact that the Negro has a tendency to connective tissue overgrowth, illustrated by the frequency of keloids, neurofibromas and fibroid tumors of the uterus. Disturbances in the bones of the Negro are unusually common, such as rickets, osteomalacia, gummas and yaws.

The hematopoietic system shows singular characteristics. While pernicious anemia, the leukemias and thrombocytopenic purpura are all rare diseases in the Negro, sickle cell anemia is a disease limited almost exclusively to this race. Melanosarcoma is also a rare disease in the Negro.

The foregoing diseases are but a few examples which show the differences in the mesoderm of the Negro and the white races.

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MSMS

Children need praise and encouragement. Material praise in the form of something the child's heart craves is the sort that reaches them soonest and stays with them longest, for they are children and still love childish things.—Angelo Patri.

Chronic Non-Specific Prostatitis and Gastro-intestinal Complaints

By Joseph A. Winter, M.D.
St. Joseph, Michigan

EVERY GENERAL practitioner frequently sees patients who present vague gastro-intestinal complaints. These patients give a history of having had "stomach trouble" for years; they complain of attacks of abdominal pain, gassiness, flatulence, inability to eat fried and greasy foods. They are frequently inveterate takers of soda and proprietary antacids. They usually tell of having "doctored" for these complaints with very little success. Some of them have had x-rays of the gastro-intestinal tract; almost invariably these roentgenograms show nothing wrong with the stomach.

Of all the diagnostic procedures to which these patients have been subjected, the complete examination of the prostate gland is the one most frequently overlooked. An occasional patient will tell of having had one rectal examination, but this is exceptional.

The value, in fact the necessity, of examining the prostate gland has been stressed again and again in all medical publications. In spite of this, it seems that the region of the prostate remains *terra incognita* to an unfortunately large percentage of general practitioners. Too many of us are apt to forget that there is an easily accessible orifice near the lower end of the vertebral column, that a finger can be inserted into this orifice and that pertinent and valuable information can be gained by so doing. Although it has been said many times before, it should be said again that the investigation of the prostate gland is as important a part of the examination of the male patient as the investigation of the mouth.

The examination of the prostate consists of two steps. The first is the gentle insertion of the lubricated gloved finger into the rectum and the gentle palpation of the gland, observing the size, shape, consistency and degree of tenderness. After this has been accomplished, gentle pressure on the gland will result in expulsion of the prostatic secretion, which should be examined under the microscope, using the dry, high-power objective.

A normal prostatic smear shows less than 10 pus cells per high-power field, plus globules of lecithin; at least three such normal smears should be obtained at weekly intervals before it can be said that prostatitis does not exist.

Incidence

Chronic non-specific prostatitis is of almost unbelievable frequency. A study of inductees made at Fort Sill showed that approximately 20 per cent of a group of young American men had demonstrable prostatic inflammation.[2] Other authors estimate that an even higher percentage of prostatitis exists; Hinman[4] says that 35 per cent of all males have infected prostates, while Nicholson[6] says that, of men past thirty, 35 per cent have prostatitis. Routine prostatic examination on all my male patients has convinced me that these figures are definitely not exaggerated.

Symptomatology

The symptoms of chronic prostatitis, as discussed in medical literature, are usually classified in two groups, the urinary and the sexual disturbances. Among the urinary symptoms, according to Kretschmer[5], are urethral discharge, frequency, burning, nocturia, urgency, hesitation, stinging, pyuria, dribbling, hematuria, straining and prickling. Of these, personal observation has led me to conclude that the symptom of dribbling, that is, wetting one's underclothing shortly after apparently completing the act of urination, is pathognomonic of prostatitis.

Sexual disturbances include insecure, painful or absent erections; premature, delayed or sensationless ejaculations and loss of libido.[9]

A search of the literature has shown that few authors have stressed the relationship between prostatitis and gastro-intestinal complaints. Nicholson[6] mentions that, as a focus of infection, the prostate can produce functional complaints of the gastro-intestinal tract. Henline[3] says that gastro-intestinal manifestations may appear and "dyspepsia" and flatulence may be prominent. Wesson[9] states that abdominal symptoms are not uncommon, and that gastroenterologists are sometimes consulted because of a complaint of obstruction or tumor in the lower bowl, due to the presence of an enlarged prostate. Adams[1] mentions that appendices are removed in the course

of a genital infection such as prostatitis. Turner[7] says that functional gastric disturbances can occur as a result of prostatitis.

The symptoms referable to the digestive tract, and caused by prostatitis, include the following:

1. A sensation of fullness in the epigastrium.
2. Gaseous distension and flatulence.
3. Inability to eat, without discomfort, such foods as fat foods, greasy foods, the gas-forming vegetables. Occasionally, the patient complains of inability to digest starches.
4. Pain, of varying degrees of severity, around the umbilicus or following the line of the belt around the abdomen. This pain seldom has any definite relationship to food intake. One common complaint is that the pain comes on an hour or so after breakfast, then persists throughout the day, without being relieved by eating. Again, one hears that the pain is relieved by food and antacids.
5. The appetite may be almost non-existent or it may be good, in spite of the complaints of abdominal discomfort.

It can be seen that all these complaints are vague and do not quite fit into the category of gall-bladder disease or of peptic ulcer. It is always a temptation to suggest that the patient have a roentgenographic study of the gastro-intestinal tract, just to be on the safe side. But this added expense to the patient can be obviated if further questioning elicits such complaints as dysuria, nocturia, dribbling, backache and loss of potency. A rectal examination which reveals a swollen, tender prostate and the appearance of pus cells, singly or in clumps, on the microscopic slide, clinch the diagnosis.

Case Histories

Case 1.—J. H., aged thirty-nine, married, laborer, had had a "bad stomach" for several years. He complained of gassiness and said his food soured on his stomach. He had pain in epigastrium and lower abdomen; occasionally had precordial pain and a smothery sensation on lying down. He was constipated; took milk of magnesia about every other day. He had had x-rays of the stomach and intestines within the last two months; these showed no evidence of any disease process. Further questioning revealed the complaints of backache and nocturia twice nightly. Rectal examination showed an enlarged, tender prostate; smear 4 plus pus.

He was given capsules of Ext. Belladonna, Phenobarbital and Kaolin to relieve the symptom of gassiness, and was started on a course of prostatic massages. After three weeks, during which time he was massaged twice a week, he was totally relieved of his gastro-intestinal symptoms, and was able to discontinue all medications without return of his complaints. He made the observation that he felt better than he had for years and that he was convinced that, for the first time, the actual cause of all his difficulties was being treated.

Case 2.—A. D., aged thirty-five, married, factory worker, complained of vague gnawing pains in upper abdomen, coming on about two hours after breakfast. Pain was relieved by eating, partially relieved by antacids. Appetite was good. He was distressed by such foods as cabbage and onions. He had a tendency toward impotency. The prostate gland was swollen and tender. Smear showed occasional pus cell and absence of lecithin globules. A smear taken four days later showed 2 plus pus, while a smear taken three days after the second showed 4 plus pus, cells being found singly and in clumps. He is still under treatment, but his gastro-intestinal complaints have entirely disappeared.

Case 3.—O. P., aged forty-eight, married, machinist, had had "stomach trouble off and on for the last twenty years." He complained of pain in the umbilical region, the pain coming and going and especially worse at night. Pain was relieved by taking food. He was frequently nauseated after meals, especially after breakfast. Highly seasoned foods caused distress. X-rays taken three years ago showed a normal stomach and duodenum. Prescribed antacid medications gave only temporary relief. The genito-urinary history showed nocturia of once nightly, increased urinary frequency in cold weather and impotentia eregendi. The prostate was enlarged to almost twice normal size and extremely tender. It was impossible to obtain any prostatic secretion at this time and also with the next massage. The third massage showed 2 plus pus and an absence of lecithin globules. Even at that time his gastro-intestinal complaints were decidely relieved.

Comment

These three cases show all the points which are desired to be made. The patients have complaints strongly suggestive of peptic ulcer or gall-bladder disease, but yet these complaints are not quite typical. These patients had all had previous medical attention for their abdominal distress, getting only temporary relief from the usual medical and dietary regime. None of them had ever had an examination of the prostate. They all obtained noticeable relief after three or four massages and continued to improve with further treatment. It was necessary to repeat examinations before obtaining microscopic proof of infection.

These cases are presented because they are illustrative of the relationship between prostatitis

and gastric dysfunction, not because they are unusual. Within the last five years at least twenty-five other similar cases have been seen and treated with satisfactory results in relieving the gastro-intestinal difficulties.

No discussion has been made of the technique of prostatic massage; that has been so completely described in the texts and in the literature that further exposition would be redundant. Nor has there been any attempt to discuss the etiology of prostatitis; it is apparently agreed that focal infection elsewhere in the body is most apt to be the cause.

Some mention should be made of the possible endocrinologic effect of prostatic massage. The prostate is said to have no demonstrable internal secretion[8], yet the effects of prostatic massage are so similar to those obtained from the administration of testosterone, especially as regards such complaints as nervousness, irritability, loss of libido and sluggish cerebration, that it seems worth while to suggest that this subject is deserving of further investigation.

Summary

1. Various vague gastro-intestinal complaints, suggestive but not typical of peptic ulcer and cholecystitis, are apparently caused by chronic non-specific prostatitis.

2. The value of prostatic examination and treatment of prostatitis is again called to the attention of the profession.

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DOCTORS NEEDED!

Report from Procurement and Assignment Service

AREAS NEEDING MORE PHYSICIANS

City	Pop.	County	City	Pop.	County
Charlevoix	2299	Charlevoix	Gladwin	1600	Gladwin
Clare	1844	Clare	White Cloud	811	Newaygo
Clio	1711	Genesee	Shelby	1367	Oceana
Sunfield	348	Eaton	Mio	600	Oscoda
Beaverton	528	Gladwin	Decatur	1599	Van Buren

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Lapeer State Home & Training School, Lapeer. Male and female physicians are needed. Excellent opportunity for training and experience in research in General Medicine, Pediatrics, Orthopedics, Surgery, Endocrinology, Neurology, and Psychiatry. Located 60 miles due north of Detroit. Write to R. E. Cooper, Med. Supt.

AREAS WITH NO PHYSICIANS

City	Pop.	County	City	Pop.	County
Lincoln	295	Alcona	Middleton	450	Gratiot
Central Lake	659	Antrim	Bannister	262	Gratiot
Ellsworth	347	Antrim	Cambria	200	Hillsdale
Standish	981	Arenac	Montgomery	313	Hillsdale
Au Gres	317	Arenac	Waldron	424	Hillsdale
Baraga	1110	Baraga	North Adams	496	Hillsdale
Freeport	405	Barry	Hubbell	1100	Houghton
Auburn	600	Bay	Sidaw	300	Houghton
Benzonia	340	Benzie	Beacon Hill	200	Houghton
Elberta	617	Benzie	Okemus	300	Ingham
Thompsonville	324	Benzie	Dansville	351	Ingham
Stevensville	382	Berrien	Webbersville	508	Ingham
Bedford	300	Calhoun	Clarksville	309	Ingham
Tekonsha	636	Calhoun	Alpha	497	Iron
Jones	200	Cass	Rosebush	400	Isabella
Indian River	300	Cheboygan	Weidman	350	Isabella
Topinabee	121	Cheboygan	Kalkaska	1132	Kalkaska
Trout Lake	260	Chippewa	Augusta	785	Kalamazoo
Barbeau	100	Chippewa	Parchment	934	Kalamazoo
Rapid River	350	Delta	Ada	450	Kent
Sagola	800	Dickinson	Luther	343	Lake
Levering	300	Emmet	Cedar	265	Leelanau
Alanson	330	Emmet	Northport	606	Leelanau
Montrose	675	Genesee	Clayton	395	Lenawee
Marenisco	400	Gogebic	Cedarville	400	Mackinac
Anvil Location	500	Gogebic	Onekama	340	Manistee
Watersmeet	600	Gogebic	Gwinn	1300	Marquette

(Continued on Page 242)

Home Service for Veterans

The eyes of this Nation have been focused on the Veterans Administration awaiting an answer to the question of how the disabled soldier is to be cared for. Present-day Veterans hospitals are not adequate in size and equipment to care for the vast number of returned men who need treatment, and it will take many months, even years, to provide necessary bed space to supply the demand.

Fortunately an answer to the situation has been furnished in Michigan by a mutual and harmonious understanding between the Veterans Administration and the doctors of medicine. It is a recognition that this health problem of National scope can best be administered on a local level, and at the same time ease the load on overcrowded government hospitals. The Veteran can have the doctor of his own choice, and he can remain home.

The State-wide plan is the first of its kind, and merits the wholehearted support of every physician in the State. If successful, the use of the family Doctor by the Veterans Administration, will be sure to spread over the whole country. To succeed, every disabled veteran must receive, and is entitled to receive the very best service the medical profession is capable of rendering, thus demonstrating in a practical way that the private practice of medicine is the best way for all concerned.

President, Michigan State Medical Society



President's Page

Editorial

MICHIGAN MEDICAL SERVICE AND THE VETERAN

Michigan Medical Service has signed a contract with the Veterans Administration for the care of veterans with service-connected disabilities by their home doctors. There has been much dissatisfaction with the care rendered the veterans in the past. The veteran had to make long trips to the hospitals, and then arrangements had to be made with the home doctor and the bureau for the care. The result was sadly disappointing, the publicity was widespread and unfriendly to the Veterans Administration. So far as Michigan is concerned that is all in the past now. The same condition can be true in other states. Michigan again has pointed the way.

The suggestion of caring for the veteran through his family doctor and our Michigan Medical Service was made many months ago. Plans were developed, studies of the problem made, contacts with the American Legion, and the Bureau at Dearborn, and then an attempt to get the proposal presented to the Administration in Washington. This first attempt was summarily rejected. We did not despair, and continued to perfect plans. Last October Major General Paul R. Hawley, Chief of the Medical Service of the Veterans Administration, made a speech in which he related their problems and asked for a solution, suggesting some kind of a working arrangement with the organized medical profession. This speech led to a renewed contact with the Veterans Administration, a conference with Major General Hawley, and a trip to Washington by several of our officers where the plan was approved. Details have been worked out, and a contract was signed December 27, 1945. General Omar N. Bradley, the new head of the Veterans Administration, made the announcement to the press and wide publicity was obtained.

By deciding to use existing agencies, General Bradley and Major General Hawley have introduced a practical plan for veterans' medical care which can be in full operation in weeks instead of years. They have developed a pattern which, if pursued nationally, will save much time and expense otherwise required for travel of veterans to veterans' institutions, and they have further advanced General Bradley's announced policy of decentralization.

Briefly, Michigan Medical Service through its registered participating doctors will give the veteran home and office care for service-connected disabilities. For male veterans that includes all disabilities that are accepted by the Veterans Administration as having been due to military service. For the female veteran that includes all services other than normal deliveries. The law now provides for such services, and also that veterans with non-service connected disabilities may receive care if they sign a statement that they are unable to pay the regular fees, and there is a hospital bed available. There are no Veterans Administration beds for women.

This contract went into effect January 15, 1946. Information and instructions have been sent to the Michigan doctors, with a card to sign indicating the willingness of the doctor to render this service at the fee scheduled. This is the Minimum Uniform Fee Schedule For Governmental Agencies adopted by the Michigan State Medical Society House of Delegates in September, 1945. It is necessary that this card be signed and returned to the Executive Office at once in order to place the doctor's name on the registered list. These names will automatically be placed on the "Fee Designated" list. Only Doctors of Medicine on this list can be paid for services to veterans.

When a veteran thinks he has a disability needing attention and traceable to war service, he writes the Veterans Administration in Dearborn, Michigan, asking for registration. If it is an emergency, he or his representative, who may be his doctor, may call the Veterans Administration by telephone collect, and get an immediate authorization. Michigan Medical Service is promptly notified and the veteran given a card which is his authority for care from his home doctor. A single report is made on a very much shortened form, and sent to Michigan Medical Service, which will pay the doctor and be reimbursed by the Veterans Administration.

Much commendation is due the officers and committees of Michigan Medical Service for making this care available to the veteran in his home

town, and by his own family physician. A service has also been rendered to the doctor, as it restores to his care literally thousands of his patients who otherwise would have been regimented into state medicine. A precedent has now been established whereby government recognizes the voluntary non-profit plans for the rendition of services to its wards.

A MEDICALLY SPONSORED HEALTH LEGISLATION PROGRAM

A SET OF PRINCIPLES for the provision of medical care by health legislation beneficial to the people was adopted at Chicago, December 2, 1945. The sponsoring body was two hundred eight executive officers—Presidents, Presidents-elect, Secretaries, Editors, and Executive Secretaries, representing forty-two State Medical Societies. This resolution was presented to the American Medical Association House of Delegates, and orders were issued by that body to study for six months. *THIS WILL BE TOO LATE!* This set of principles in in the form of a resolution was published in the December number of THE JOURNAL. They were repeated in the January number. We are repeating them again in this issue.

Why the repetition? We believe this is one of the most momentous actions taken by an organized and thinking medical profession. We believe this action should have been taken long ago, but think if it is followed up promptly and vigorously it may not be too late. President Truman gave us a speech on November 19, 1945, which pointed out the way those in power in Washington are now thinking. He had hinted at the same thing on September 6, but detailed his plan on November 19. This same day Wagner, Murray and Dingell reintroduced their socialized medicine bills, changed in some minor details, but accomplishing the same purpose as their predecessors. January 3, 1946, President Truman again appealed to the people in behalf of his legislative plans, and mentioned health legislation as one of the "musts."

As indicating the extent to which those who would control medicine and the nation's health, read General Parran's release to "All officers of the Public Health Service" on page 178, written December 10, but released the day after the President's January 3 appeal. One of the Washington Business Letters of this same week stated that part at least of this health legislation will be enacted this year.

We are not scared, but any man with common sense would study the trends in his own business, and make an earnest effort to have some influence on the determination of those trends. Organized medicine has not yet been consulted in the development of social plans involving the whole future of the health of the nation. We must make our opportunity. We must assert our attitude. We must suggest something that can work.

We have done that.

The executive officers of forty-two state medical societies have pointed the way.

We shall continue to present this material as long as there is any hope of making it effective.

There is more of this story to tell.

While the American Medical Association reposes and studies (sleeps is a better word), the proposers of the resolution must be activated by the forty-eight State Medical Societies, as indicated by the final paragraph of the resolution—now, not six months from now.

The Conference of Presidents and other officers of State Medical Societies started this offensive, so while Rome sleeps, the forty-eight fiddlers must quicken their resolution into kinetic action before Nero (Government control) burns up the city.

Michigan is one of the forty-eight. It will do its share of the job, and more. Will the other forty-seven states do as much to save a great profession, and themselves?

GI BILL OF RIGHTS

THE GI BILL of Rights has been referred to many times with commendation for the benefits it gives the returned veteran. No one has begrudged the veteran whatever benefits he may secure from this bill, and in repayment for the sacrifices and services to the country in the hour of war. Recently the benefits have been extended. It has been provided that doctors taking short courses may have the tuition paid even though the course does not extend through the major part of a school year. Allowances have been increased for the monthly living expenses to $90.00 a month for a man with dependents. This still is not adequate considering the housing shortage and increased living expenses.

But now a new difficulty has arisen, and a ridiculous one. It has been interpreted that a returned officer may not take advantage of this schooling while he is on terminal leave. (Terminal leave is

that time the officer is given in lieu of leaves he might have taken but could not because of his war service. It may accumulate up to 120 days, and is an extension of salary after he is separated from active service.) While on this "Leave" and doing nothing but resting, he will not be allowed to start his rehabilitation schooling at government expense. This is a useless waste of valuable time. The doctor wishes to get back home and to work, and his former patients are clamoring for him. He could start his postgraduate courses, and in many cases finish them during this time off, but if he wishes to benefit by the GI Bill of Rights he must wait until his terminal leave is finished. There will be weeks or months of valuable time wasted, and it could be so easily changed. A mere directive. Medical men are not the only ones involved. Soldiers who wish to finish their college courses are finding the same difficulty.

The excuse given for this interpretation is that the veteran is still being paid his salary by the government, and to make the terminal leave and the school period overlap would be to give double benefits. This is not true. The veteran is entitled to the school benefits, and only has to wait to get them. A veteran at his request could be assigned to the school during his terminal leave, and then be placed on allowances when the terminal leave time is passed. This would save time for the student and be an actual saving of money to the government.

AMERICAN FREEDOM THREATENED

THE rising tide of threats against the freedom of American principles is spearheaded by proposals for governmental health insurance.

Despite all assurances to the contrary, it is clear that this is pure unadulterated "socialized medicine," which is always the entering wedge to the general socialization of a country. Surely no one can believe that governmental intervention in private, voluntary activity will stop the socialization of medicine and hospitals. As national socialization in Europe became more widespread with each new contact, so will it in America—if it is not stopped *now*.

It seems especially inconceivable that government should be proposing *compulsory* health insurance when the doctors and the hospitals of the nation already have established their own non-profit *voluntary* organizations to serve the same purpose. These non-profit programs are developing at an unprecedented rate and are performing a splendid service for the benefit of the people. To illustrate their effectiveness, the Michigan plan —Michigan Hospital Service—already protects a quarter of the entire population of this State against hospital bills, and its medical counterpart —Michigan Medical Service—now protects 868,000 men, women and children of Michigan—one in every six persons in this State.

Most unfortunately, the intimate relationship between the doctors, the hospitals, and their own prepayment plan is not understood by a majority of the people. They do not *know* how strongly the hospitals and the medical profession have moved to meet this problem or how rapidly the voluntary programs are being perfected. Until they do know, there will continue to be popular pressure for compulsory government health insurance.

It is the individual responsibility of every doctor of medicine in this State to bring the *facts* to the people—that a plan of medical and hospital care exists in Michigan which is *better* than any experimental plan proposed by politicians in Washington.

The doctor's position enables him to do much to tell the people that he and the other practitioners of Michigan, together with the hospitals, are meeting this problem in the American way—the way the people want the problem to be met.

Public relations begin at home, Doctor!

ON THE RUN . . . .

"Drug fever" must not be ignored since it is a definite danger signal indicating that the patient has been sensitized to the drug being used.

• • •

In gas gangrene, when adequate excision of affected tissue is impossible, local injection of antitoxin may inhibit cytolytic action.

• • •

The possibility of gastric cancer in patients with pernicious anemia must be kept constantly in mind.

• • •

Local treatment of impetigo contagiosa with sulfathiazole carries a risk of sensitization of 2½ per cent of the cases.

• • •

As new specific agents are developed and come into use, it must always be remembered that the doctor has not finished with the case simply by writing a prescription for any of these agents.

Selected by W. S. Reveno



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Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

MICHIGAN'S HEALTH IN 1945

The general death rate is expected to drop slightly below last year's rate of 10.05 per 1000 population to about the five-year average of 9.9. The infant death rate, most delicate index of the health status of any community, will be the lowest in Michigan's history. There was no over-all increase in the communicable diseases with the exception of diphtheria.

The ten leading causes of death continued in the same order as in 1944. As usual, heart disease led all other causes of death in Michigan with cancer second. During the first ten months there were 14,201 deaths due to heart disease against 14,030 for the same period last year. Cancer killed 5,902 persons during the ten-month period compared to 5,791 last year. Apoplexy was in the third place for the ten-month period with 4,278 deaths, followed by accident, 2,766; nephritis, 2,168; pneumonia, 1,477; tuberculosis, 1,465; diabetes, 1,245; premature births, 1,121; and hardening of the arteries, 818.

For the first ten months of 1945 deaths of infants under one year of age were at the rate of 36.12 per 1,000 live births, compared to the ten-year average of 42.02. Also at a record low are maternal deaths which were at the rate of 1.5 per 1,000 live births against the ten-year average of 3.01.

Total number of babies born in 1945 will reach 112,000 judging by the figures for the first ten months. This is a slight drop from the previous five-year average.

Cases of most communicable diseases were below average during the year. Diphtheria, an exception, reached its highest point since 1937 with 629 cases reported compared with 418 for 1944. During the first ten months there were thirty-nine diphtheria deaths reported compared with twenty deaths for the corresponding period of 1944. A major epidemic was apparently averted by a wide-scale immunization program. Physicians' requests for the health department's free diphtheria toxoid more than doubled in 1945 over the previous year.

Reported cases of poliomyelitis for 1945 totalled 215, compared to a five-year average of 357. Of these 1945 cases, forty-three were from Detroit. The remaining 172 were largely centered in the southern half of the lower peninsula; no cases were reported from the Northern Peninsula. Of the 215 reported cases, paralysis could be demonstrated in 102. Three cases were undetermined; 110 were cases in which paralysis was not demonstrated at any time.

In reviewing the poliomyelitis incidence for the past twenty years, peaks of high incidence would seem to be spaced four years apart. Michigan's highest poliomyelitis year was 1940, when 1,228 cases were reported.

Cases of Brucellosis (undulant fever) totalled 243 compared with 96 for 1944.

Typhoid fever was at an all-time low with only fifty-seven cases reported against seventy-seven last year. Ten new typhoid carriers were identified.

Incidence of measles was at the lowest point in eight years with 6,124 cases reported. However, toward the end of the year there was a marked increase in cases.

Newly reported cases of syphilis dropped eight per cent during the first 11 months compared to the same period in 1944. This is probably due to the decrease in Selective Service examinations. However, the 14,794 cases reported are still above the five-year average. Reported cases of gonorrhea totalled 11,625, an all-time high.

STAFF MEMBERS RETURN FROM MILITARY SERVICE

Col. Stuart T. Friant, on military leave from the Michigan Department of Health since November, 1940, has returned as Director of the Bureau of Records and Statistics.

Col. J. T. Tripp has returned after three and one-half years' military leave to the Bureau of Laboratories where he is Chief of the Biologic Products Division. Col. Tripp was on loan from the Army Medical Corps to the Chinese government for the purpose of establishing standards for the manufacture of biologic products.

NEW HEALTH DIRECTOR APPOINTED

Russell Pleune, M.D., M.P.H., has been appointed director of the Northern Peninsula Office of the Michigan Department of Health, succeeding W. J. Menke, M.D., who has resigned to enter private practice. Prior to entering military service, Dr. Pleune was director of the Houghton-Keweenaw health department.

GAMMA GLOBULIN FOR MEASLES MODIFICATION

Since 1946 is likely to be a high measles year, physicians may be interested to know that the health department has a supply of gamma globulin for modifying the disease. This product, offered in co-operation with the American Red Cross, was obtained as a byproduct from blood donated by volunteers through the American Red Cross for the armed forces.

NEWS BRIEFS OF 1945

During the year 2,275 patients were treated at the Michigan Rapid Treatment Center in Ann Arbor. Of these 1,249 had primary or secondary syphilis. All patients accepted were unable to pay for private care and were referred by their physician or health officer.

* * *

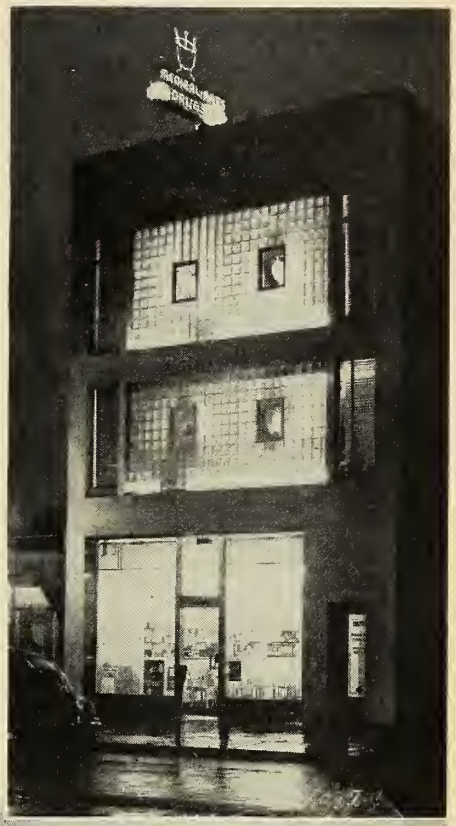
During the year 2,269,777 doses of biologic products were produced by the Bureau of Laboratories for free distribution. The Laboratories ran 1,236,514 tests for physicians of the state.

(Continued on Page 228)

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THREE FLOORS OF PRESCRIPTION NEEDS AND PHYSICIAN'S SUPPLIES

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Over augmented Michigan radio network including WELL Battle Creek, WBCM Bay City, WATT Cadillac, WXYZ Detroit, WDBC Escanaba, WFDF Flint, WLAV Grand Rapids, WJMS Ironwood, WIBM Jackson, WKLA Ludington, WDMJ Marquette, WKBZ Muskegon, WSOO Sault Ste. Marie, WTCM Traverse City.

10-10:15 p.m.
WJIM Lansing
This is your program
Invite Your Patients To Listen In

NEWS BRIEFS OF 1945

(Continued from Page 224)

Postwar plans for water supplies and sewage disposal plants involving more than $150,000,000, were reviewed by the Bureau of Engineering for the State Planning Commission.

* * *

In an effort to conserve the hearing of school children, 25,000 children in 50 schools were given hearing tests. Approximately four out of every 100 children were found to have a hearing loss and to need treatment by an ear specialist.

* * *

Using three x-ray units in fifty-seven counties the state health department x-rayed 108,000 persons in 1945. Although the number of patients in Michigan's sanatoria has remained practically the same for the past two years, there was a decrease in the number of new cases reported in the first 11 months of 1945, a total of 5,014 cases reported against 5,940 for the same period last year.

RED CROSS PLASMA RELIEVES STATE SHORTAGE

New impetus to Michigan's civilian blood plasma program is given by release of surplus dried plasma to the states by the American Red Cross. Shortages of blood plasma have existed in some areas where demands of large hospitals exceeded the area's blood donations. Availability of Red Cross plasma improves this situation. With this additional plasma to supplement supplies, the state health department now plans to expand its program to include production of gamma globulin and serum albumin.

Correspondence

Dec. 12, 1945.

Michigan State Medical Society
Lansing, Michigan

Gentlemen:

I would like to express to you my personal appreciation of the fine quality of leadership that the Michigan State Medical Society has given American medicine, and particularly in view of the fact that this leadership has produced some specific results in the way of the action of the AMA House of Delegates. I know that many men and state organizations share with me this admiration and appreciation of service the Michigan Society has rendered to the medical profession of the United States.

Your state officers, and other interested individual doctors have a truly broad understanding of the problems facing American medicine, and have done something constructive about it. Your men have shown a fine interested devotion to this cause, and have neither spared themselves of effort or energy, or the necessary money to bring the program to successful conclusion. I wish to congratulate all of you.

Sincerely yours,
(Signed) Arthur J. Offerman, M.D.
President
Nebraska Surgical Plan
Omaha, Nebraska

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14 Dec. 1945

Editor, Journal
Michigan State Medical Society

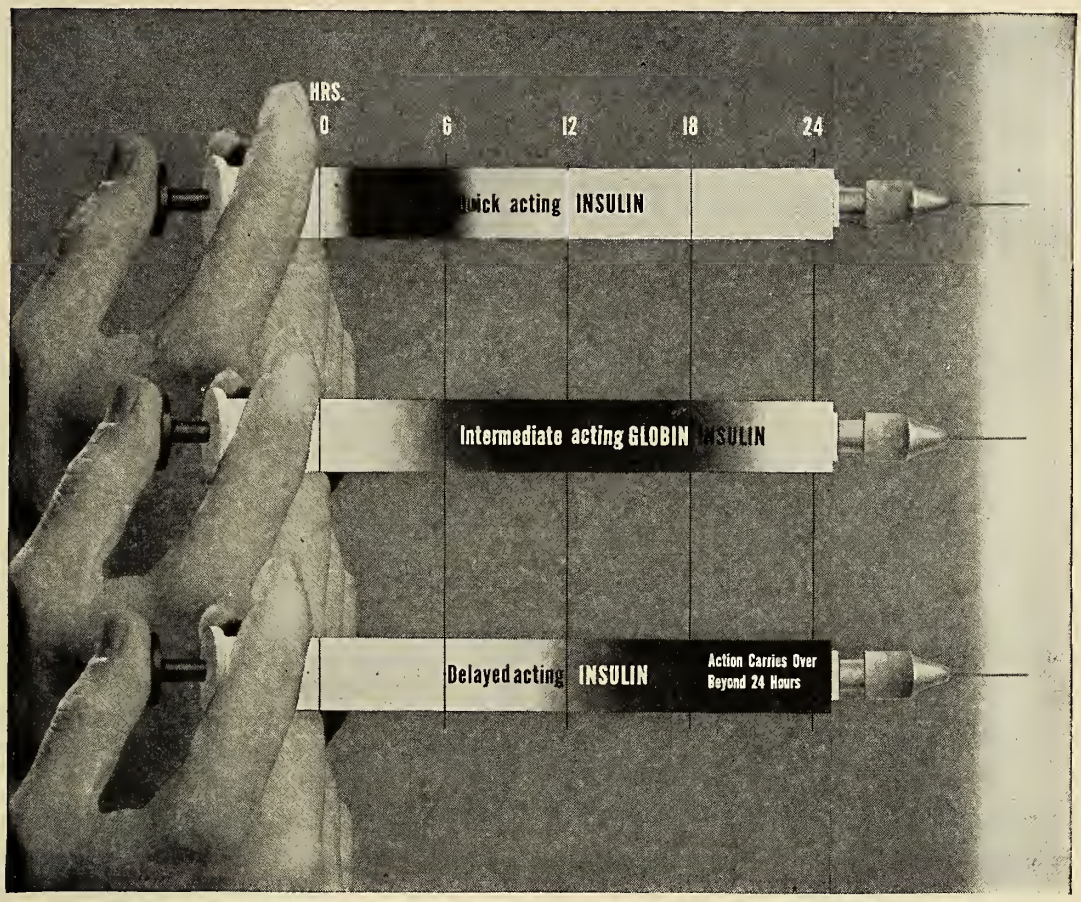
Dear Sirs:

I have only today received my Journal of June, 1945, since it traveled to Europe and back to reach me. I wish to call your attention to an article on page 554 concerning T/4 Duane M. Kinman. For the records, it should be noted that T/4 Kinman was not a member of the 10th Infantry, but of the 2nd Infantry in the 5th Infantry Division, and the Regimental Surgeon was Major Alois Smitzel of Illinois. At the time I was Assistant Regimental Surgeon.

Respectfully,
M. T. Greenburg, M.D.
9105 Van Dyke,
Detroit 13, Mich.

Editor's Note—The information used when the article was prepared for The Journal was copied from the press—a news item, which could have been wrong. We are glad to make this correction.

Your 3 choices when treating diabetics...



WHEN A PHYSICIAN decides that a patient needs more than diet to control diabetes, he can now choose from three types of insulin. One is quick-acting and short-lived. Another is slow-acting and prolonged. Intermediate between these, is the third—the new 'Wellcome' Globin Insulin with Zinc. Its action begins with moderate promptness yet is sustained for sixteen or more hours—adequate to cover the period of maximum carbohydrate ingestion. By night, activity is sufficiently diminished to decrease the likelihood of nocturnal reactions. Physicians who consider the many advantages of this new third type of insulin now have another effective method of treating diabetes.

'Wellcome' Globin Insulin with Zinc is a clear solution, comparable to regular insulin in its relative freedom from allergenic properties. Accepted by the Council on Pharmacy and Chemistry, American Medical Association. Developed in the Wellcome Research Laboratories, Tuckahoe, New York. U.S. Patent No. 2,161,198. Available in vials of 10 cc., 80 units in 1 cc., and vials of 10 cc., 40 units in 1 cc. Literature on request. 'Wellcome' trademark registered.

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In Memoriam

Frederick C. Warnshuis, M.D.



In his sixty-sixth year, Frederick C. Warnshuis died January 6, 1946.

In the history of the Michigan State Medical Society it should be recorded that to Fred Warnshuis must go, in a large degree, the credit for the spade work which today makes possible this fine organization. That he receives from the profession too little credit for his accomplishments is due to certain unfortunate antagonisms which, in one way or another, he permitted to develop, generally quite unnecessarily.

As chairman of The Council, I worked with him intimately over many years, and came more and more to appreciate his exceptional natural ability. More than most men he had a vision of what the future of medicine would hold for the public and the physician. His reports as secretary of the State Medical Society give abundant evidence of this.

In his secretary's report to The Council in 1924 he proposed that "The Council be charged with the duty of providing and conducting, each year, in each councilor district, postgraduate courses, and medical educational clinics directed to the laity." This is but one of the many forward looking programs which he initiated and which came to fruition in the years after he had left the secretaryship of the Society.

For twenty years he was secretary of this Society, and handled its affairs with rare executive ability. During much of this period he was speaker of the House of Delegates of the American Medical Association where he presided with unusual efficiency. In 1934 he left us to become secretary of the California Medical Association. For the past few years he had been attached to the United States Consular Service, more recently assigned to Windsor, Ontario, where he died.

Doctor Warnshuis was an able surgeon. Butterworth Hospital, on whose staff he was, profited well by the example he set of beautiful technique and effective operating room procedure. His book on operating room technique for nurses at one time was used in many, if not most, of the larger nursing schools, both in this country and in Canada. He was active in many Grand Rapids civic affairs. He was one of the organizers of the Rotary Club of Grand Rapids. For many years he was on the State Board of Registration in Medicine. During World War I he was Lt. Colonel in charge of a

(Continued on Page 236)

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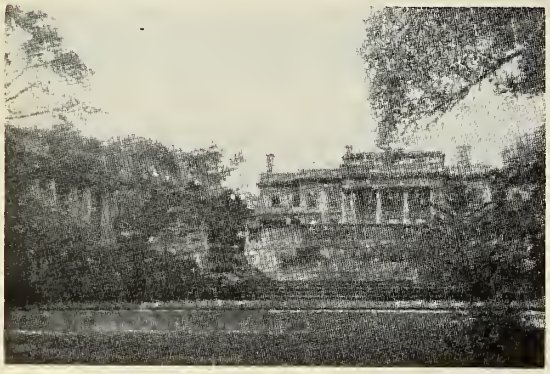
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(Continued from Page 232)

base hospital in France. He was a charter member of the American College of Surgeons, a member of the Society of Industrial Surgeons, and of many other medical organizations.

There must always be credits and debits as one sums up the successes and failures in any man's life. Fred Warnshuis had little formal educational background. He literally fought his way up into a position of prominence in the professional field by sheer hard work, hard study and aggressiveness. He resisted the many knocks that came his way. His credits stand high. Long after Fred Warnshuis is forgotten, his contributions to organized medicine and to the profession will live.

B.R.C.

* * *

Jay MacDonald Burgess of Detroit was born in 1873 in Drumbo, Ontario, and was graduated from the Michigan College of Medicine and Surgery in 1900. He began practice in Detroit, following graduation, and was on the staff of Providence Hospital for many years. Doctor Burgess was past president of the Vortex Club and a member of the Knights of the Round Table. He was interested in young people's activities and served for more than twenty years on the advisory council of the Detroit Area Boy Scouts of America and was one of the few persons in Detroit to receive the Silver Beaver. Doctor Burgess died December 8, 1945.

* * *

Roy W. Chivers of Jackson was born July 18, 1878 in Prattville, Michigan. He was graduated from the University of Michigan Medical School in 1900, and after graduation located in Jackson where he remained until the time of his death. He was the son of the late William Chivers, M.D., who also practiced medicine in Jackson for many years after coming to Jackson from Colon. Doctor Roy Chivers died October 25, 1945.

* * *

Neil A. Gates of Ann Arbor was born in Ann Arbor on March 16, 1873 and was graduated from the University of Michigan Medical School in 1897. He returned at various times for summer courses in Surgery. Doctor Gates practiced in Dexter, and operated a private hospital there for ten years. In 1907 he returned to Ann Arbor, and in 1924 he established the Gates Hospital which he operated until the time of his death, which occurred July 16, 1945.

* * *

Adolph A. Gronow of Detroit was born in 1870 and was graduated from the Detroit Homeopathic College in 1911. He practiced in Detroit for 34 years. Doctor Gronow died November 18, 1945.

* * *

Stewart Hamilton of Detroit was born in Detroit in 1880 and was graduated from the School of Pharmacy and the Medical School of Northwestern University in

(Continued on Page 240)

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(Continued from Page 236)

1905. He served his internship at Harper Hospital. After his internship, he became industrial physician for the Copper Range Mine in Painesdale, Michigan. In 1909 he returned to Detroit to take up general practice. He was appointed assistant director of Harper Hospital in 1910 and in 1913 was made director. During World War I he was a captain in the medical corps of the Fourteenth Division and assigned to the Base Hospital at Camp Custer. Doctor Hamilton was one of the most eminent Americans in the field of hospital administration. He died December 18, 1945.

* * *

Harry A. Haze of Lansing was born in Lansing in 1868 and was graduated from the University of Michigan Medical School in 1895. He served one year on Doctor deNan Creed's surgical staff at the University, and then went abroad for postgraduate work in Berlin and Vienna. Returning to Michigan, he enlisted in the Army for the Spanish-American War. At its end Doctor Haze started practice in Lansing and served in many capacities. He was a member of Michigan's first medical registration board. He was a past president of Ingham County Medical Society; for six years he served as a member of the state school at Coldwater. He also served on the Lansing Board of Education, being twice named as its president. Doctor Haze died December 24, 1945.

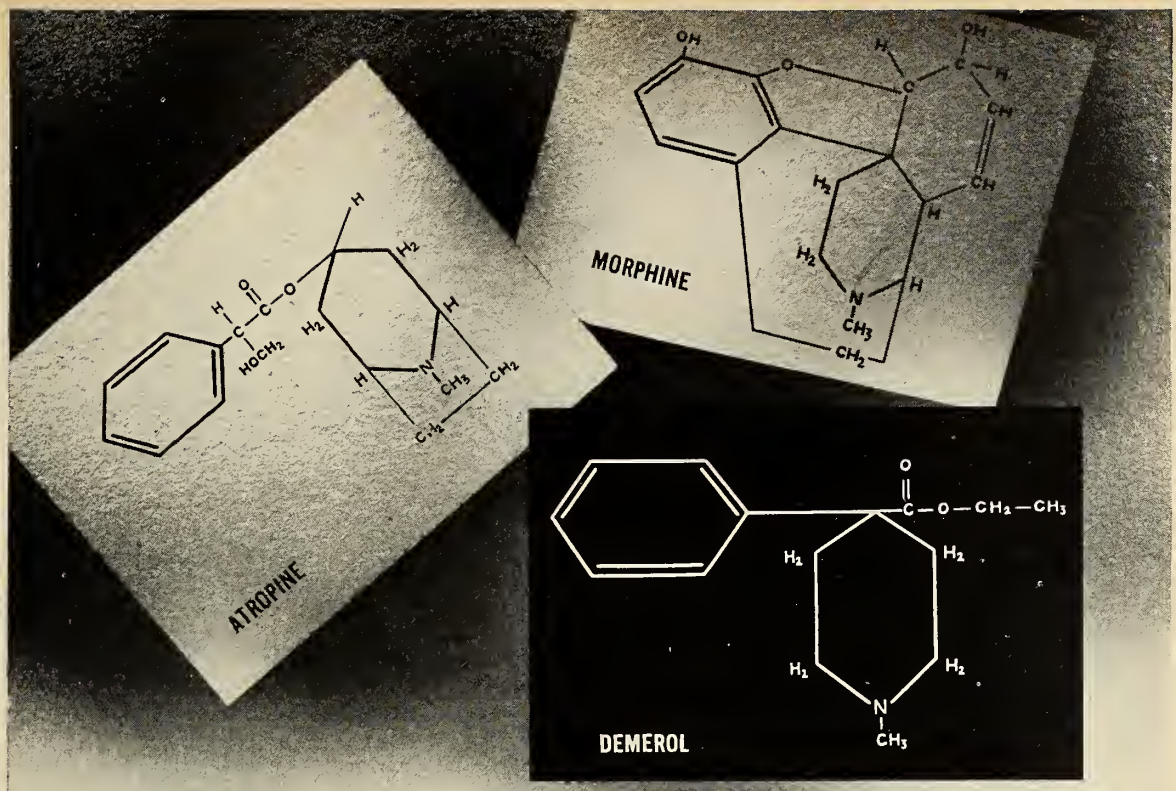
* * *

Alpheus Felch Jennings was born in Detroit in 1884 and was graduated from Harvard Medical School in 1910. He practiced in Detroit continuously since 1912, except during World War I. In 1917 he became medical officer at Selfridge Field; then assistant chief of medical service at the Custer Base Hospital. In 1918 he went overseas, and was successively attached to Evacuation Hospital 21, the Base Hospital at Camp Valdehon and the 82nd Division. He was discharged with the rank of Major. The son of Charles Godwin Jennings, for whom a memorial hospital was built by friends and admirers, Doctor Jennings followed in his father's footsteps beginning the practice of medicine in Detroit as his father's associate. He became head of Charles Godwin Jennings hospital. Following the death of his father in 1936, Doctor Jennings was a consultant on the staffs of the Detroit Tuberculosis Sanitarium, U. S. Marine Hospital and Receiving Hospital. He died November 16, 1945.

* * *

Stephen C. Mason of Menominee was born in Moberle, Mo., February 5, 1880 and was graduated from Rush Medical College in 1905. He served his internship at Gouveneur hospital in New York City. Doctor Mason located in Cherry, Ill., and in 1916 went to Menominee where he remained until the time of his death. He was a member of the Board of Education and many other civic organizations. He was a Past-President of the Upper Peninsula Medical Society and of the Menominee

(Continued on Page 242)



Chemical Relationship and Pharmacodynamic Similarity

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(Continued from Page 240)

County Medical Society. Doctor Mason died January 10, 1946.

* * *

Mansfield L. Spears, of Pontiac was born in Marianna, Florida, October 14, 1889 and was graduated from Meharry Medical College in 1917. He took postgraduate work in Columbia University and the University of Michigan. Doctor Spears had practiced in Pontiac for 24 years and was a member of the examining board of the A.M.E. Conference and Oakland County branch of the National Association for the advancement of Colored People. He died September 1945.

* * *

Harry F. Stamos of Detroit was born in Philiatra, Greece in 1903 and was graduated from the University of Michigan Medical School in 1929. He was former senior medical officer at the Detroit Naval Recruiting Station. Released from Service in 1944, Doctor Stamos reopened his practice of cardiology and internal medicine. He was consultant on the staff of St. Joseph Mercy Hospital. Doctor Stamos died December 12, 1945.

* * *

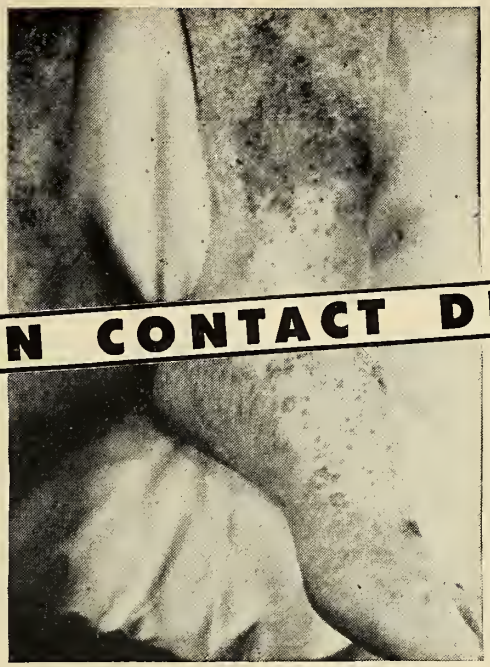
Henry Norton Torrey of Detroit was born in Creston, Iowa, October 7, 1880 and was graduated from Wayne University College of Medicine in 1906. During World War I, he served overseas as a major in the Army Medical Corps with the Harper Hospital Unit of Base Hospital 17. For a number of years he was active as a physician in the Detroit area. He was associated with a number of medical organizations and hospitals, including Michigan Mutual, Charles Godwin Jennings and Harper. Doctor Torrey died December 29, 1945.

DOCTORS NEEDED

(Continued from Page 212)

City	Pop.	County
Custer	237	Mason
Barryton	342	Mecosta
Sanford	250	Midland
McBain	489	Missaukee
Crystal	400	Montcalm
Lewiston	150	Montmorency
Hillman	363	Montmorency
North Muskegon	1694	Muskegon
Casnovia	289	Muskegon
Rose City	353	Ogemaw
Trout Creek	600	Ontonagon
Allendale	200	Ottawa
Fairview	150	Oscoda
The Heights	100	Roscommon
St. Charles	1300	Saginaw
Gardendale	100	St. Clair
Mendon	667	St. Joseph
Peck	381	Sanilac
Carsonville	433	Sanilac
Germfask	250	Schoolcraft
Perry	879	Shiawassee
Henderson	250	Shiawassee
Bancroft	581	Shiawassee
Gagetown	354	Tuscola
Fairgrove	481	Tuscola
Breedsville	184	Van Buren
Covert	600	Van Buren
Mattawan	312	Van Buren

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IN CONTACT DERMATITIS

Subjective Relief as well as Rapid Resolution

THE basic pathogenicity of contact dermatitis consists of primary skin irritation, never a preexisting allergy. In consequence, any known irritant may affect anyone, depending upon individual susceptibility and duration of contact. In acute dermatitis vesiculation is seen, but in the more common subacute and chronic varieties, lichenification, fissuring, and scaling are the rule. Pruritus is usually severe, and is a prominent symptom. Tarbonis, providing the decongestant and stimulant properties of tar, quickly controls the annoying itching and encourages rapid resolution of the dermatitis itself. Avoidance of soap and water and cleansing with oil are beneficial auxiliary measures. Tarbonis will be found of outstanding efficacy in all types of contact dermatitis and industrial dermatoses.

Tarbonis is colorless, odorless, greaseless, does not stain linen or skin. It contains 5% Liquor Carbonis Detergens extracted from selected tar by a unique process, retaining all beneficial factors of tar and eliminating the irritants. Menthol and lanolin are also incorporated in the vanishing cream base, making for a preparation of unusual pharmaceutical elegance. Specifically indicated whenever the action of tar is required.

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What's What

George C. Leckie, M.D., and Frank R. Bicknell, M.D., announce their association in the Practice of Urology, David Whitney Building, Detroit.

* * *

"Sex Endocrinology—For the Medical and Allied Professions," a new compendium, is available by writing Schering Corporation, Bloomfield, N. J.

* * *

Elmer H. Bobst, former president of Hoffman-LaRoche, Inc., has assumed the presidency and general direction of William R. Warner & Company, Inc., pharmaceutical manufacturers.

* * *

Labor is exerting great effort along the path of political power. The time is foreseen when labor may control the political agencies which in turn control the economic forces of the country.

* * *

The Gogebic County Medical Society publishes, periodically, a record of its members' attendance at County Society meetings. During the past year, out of twenty members, four have a 100 per cent score.

* * *

The Detroit Medical News (Bulletin of the Wayne County Medical Society) has instituted a "Veterans Page" containing suggestions and general information of value to veterans. Congratulations, DMN, on this valuable addition and innovation.

* * *

One hundred sixteen physicians died in action during 1945, according to JAMA. It is significant to note that 4,015 physicians died during 1945 as compared to 3,415 the previous year.

* * *

A new antibiotic plant for Michigan was announced by the Upjohn Company of Kalamazoo with the purchase of 500 acres near that city. Research work and large scale production of antibiotics will result from this expansion of facilities.

* * *

A. S. Brunk, M.D., Detroit, president of the Conference of Presidents and Other Officers of State Medical Associations, spoke on the "Aims and Purposes of the Conference of Presidents" at the National Conference on Medical Service, Palmer House, Chicago, February 10.

* * *

Mr. Wm. R. Niedelson, Detroit, has been appointed Michigan representative of the Electro-Physical Laboratories, Inc., New York (a division of Electronic Corpor-

(Continued on Page 246)

GENTLEMEN'S OUTFITTERS

K AND H

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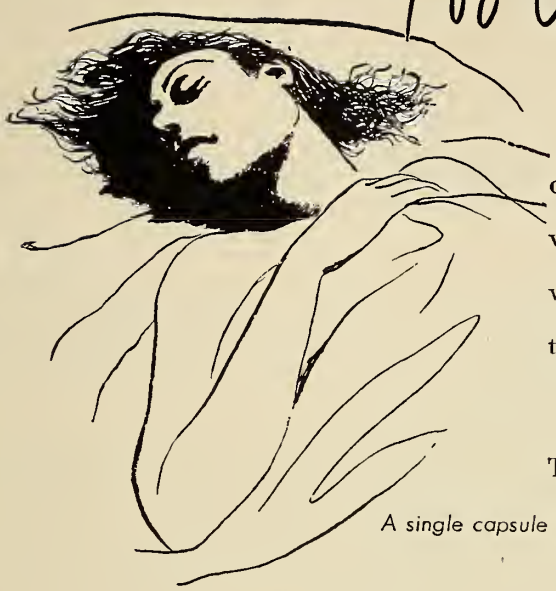
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For the new Concept



of supplying sick patients, who have mixed vitamin deficiencies, with all the essential vitamins in doses of therapeutic magnitude, specify . . .

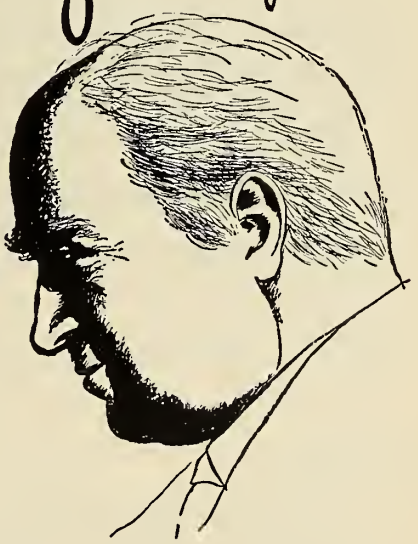
SQUIBB

THERAPEUTIC FORMULA

A single capsule contains:

Vitamin A	25,000 units
Vitamin D	1,000 units
Thiamine HCL	5 mg.
Riboflavin	5 mg.
Niacinamide	150 mg.
Ascorbic Acid	150 mg.

For the continuing Concept



of supplying well patients with maintenance dosage levels of all the vitamins as recommended by the Food and Nutrition Board of the National Research Council, specify . . .

SQUIBB

SPECIAL FORMULA

A single capsule contains:

Vitamin A	5,000 units
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Thiamine HCL	2 mg.
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Niacinamide	20 mg.
Ascorbic Acid	75 mg.

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Chicago Medical Society

WHAT—

Annual Clinical Conference

WHEN—

March 5, 6, 7, 8, 1946

WHERE—

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WHY—

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- **To inspect scientific and technical exhibits**
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- **To attend a banquet on Thursday night**

HOW—

By making YOUR reservation through The Chicago Convention Bureau, 33 North LaSalle Street, Chicago 2, Illinois.

Registration Fee $5.00

(Continued from Page 244)

ation of America). He will continue the sales and service of the Jones Metabolism machines in addition to the EPL.

* * *

Lt. Col. A. R. Woodburne, M. C. (formerly of Grand Rapids) has accepted a teaching position with the University of Colorado Medical School in the Department of Dermatology, and will open a professional office in Denver, in association with Professor O. S. Philpott, M.D., and A. J. Markley, M.D.

* * *

Louis J. Gariepy, M.D., and Paul G. Henley, M.D., Detroit, are authors of an original article "Acute Suppurative Appendicitis with Abscess Formation and Subsequent Perforation of the Anterior Abdominal Wall" which appeared in the *American Journal of Surgery,* December, 1945.

* * *

The American College of Surgeons announces it will hold ten sectional meetings, one to be held in Detroit, at the Statler Hotel, March 26-27.

The medical profession at large is invited to join with the Fellows of the ACS in this meeting.

For the program write ACS, 40 E. Erie Street, Chicago.

* * *

JMSMS of December 1945 was the largest Number in the recent history of the Michigan State Medical Society —160 pages. In addition to the scientific articles, it contained the Proceedings of the 1945 MSMS House of Delegates, the Annual Index, and a 20-page insert of the Proceedings of the Conference of Presidents and Other Officers of State Medical Associations.

* * *

The National Gastroenterological Association announces the establishment of an Annual Cash Prize Award of $100 for the best unpublished contribution on gastroenterology or allied subjects. Entries are limited to 5,000 words, to be received not later than May 1, 1946. Entries should be addressed to the Association at 1819 Broadway, N. Y. 23.

* * *

The Detroit Times is to be commended for a fine civic gesture in assisting the returning doctor of medicine by publishing a feature list of the returned veterans of Wayne, Macomb and Oakland counties.

Such a friendly gesture is of value to the individual medical veteran, as it aids him in his problems of relocation. It also furthers the work of the MSMS Medical Veterans Readjustment Program.

* * *

The Fourteenth Councilor District meeting was called in the Michigan League Building, Ann Arbor, by Councilor D. W. Myers, M.D. on January 10. Talks were presented by President R. S. Morrish, M.D., Flint, on "Medical Education"; Secretary L. Fernald Foster, M.D., Bay City, "Report on House of Delegates Actions;" John W. Castellucci, Detroit, of Michigan Medical Serv-

(Continued on Page 248)

Say you saw it in the Journal of the Michigan State Medical Society

The Preference is Overwhelming

A comprehensive report published in *Human Fertility*[1] shows an overwhelming preference by experienced clinicians for the "Diaphragm and Jelly" method of conception control.

The report covering 36,955 new cases shows that the diaphragm and jelly method was prescribed for 34,314, or 93%.

On the evidence supplied by competent clinicians we continue to suggest that for the optimum in protection the physician should prescribe the combined use of a vaginal diaphragm and spermatocidal jelly.

When you specify "RAMSES"* a product of highest quality is assured.

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1. Human Fertility, 10:25, March, 1945.

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A Spencer antepartum support designed especially for this woman. Equally effective for postpartum period.

Abdominal support provides a rest for the weight of the abdomen and is accurately correlated with support to back, thus effecting marked posture improvement.

Light, flexible, easily adjusted to increasing development.

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Spencer Supports meet your patients' needs exactly *because*: Each Spencer Support is individually designed, cut, and made at our New Haven Plant *after* a description of the patient's body and posture has been recorded and 15 or more measurements have been taken.

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For Abdomen, Back and Breasts

(Continued from Page 246)

ice, on "The V. A. Program of Michigan"; and Executive Secretary Wm. J. Burns, Lansing, who spoke on "New Activities of the State Society."

* * *

The MSMS Public Relations Committee recommends to county and district medical societies that they create inter-professional councils, and also that they hold annually a meeting at which representatives of other professional groups and civic leaders are guests of the medical society.

Such meetings have achieved desirable and outstanding results in St. Clair and Wayne Counties.

* * *

Beautiful four-color inserts have been a regular feature of JMSMS for some years. The number of advertisers using color, including four-color inserts, is increasing.

Incidentally, the number of advertisers who appreciate the readability of JMSMS is also gaining. The Editor voices his appreciation to the membership for its continued interest and growing participation in the Michigan State Medical Journal.

* * *

"Only Mr. Truman himself can say whether his national health program was intended to bamboozle the unwary or whether he really believes that private medicine can continue to grow in quality and availability under the system he proposed. Some of us may suspect the worst, but (Lord help us!) we can't be sure. What we do know is that the President has asked us to accept a scheme which is bound to result in a steady deterioration of medical standards."—Wilber J. Brons in *Chicago Journal of Commerce*, November 30, 1945

* * *

The Third Councilor District Meeting was held, under the leadership of Councilor Wilfrid Haughey, M.D., at the Hart Hotel, Battle Creek, on February 5. Eighty-three were present.

President R. S. Morrish, M.D., Flint spoke on "Health Education Needs of Michigan"; L. Fernald Foster, M.D., Bay City, spoke on "Uniform Fee Schedule for Governmental Agencies"; J. C. Ketchum, Detroit, Executive Vice President of Michigan Medical Service, spoke on "The Michigan Plan for Medical Care of Veterans"; and Wm. J. Burns, Lansing, Executive Secretary of MSMS, spoke on "Progressive Michigan Medicine."

* * *

The Sixth Councilor District meeting was held at the City Club of Owosso on Friday, January 25. Councilor R. C. Pochert, M.D., was toastmaster and introduced the speakers.

President R. S. Morrish, M.D., Flint, spoke on "Medical Education"; Secretary L. Fernald Foster, M.D., Bay City, presented "The Uniform Fee Schedule for Governmental Agencies"; and J. C. Ketchum, Detroit, Executive Vice President, Michigan Medical Service, outlined the "Veterans Administration Home and Office Medical Care Program for Michigan."

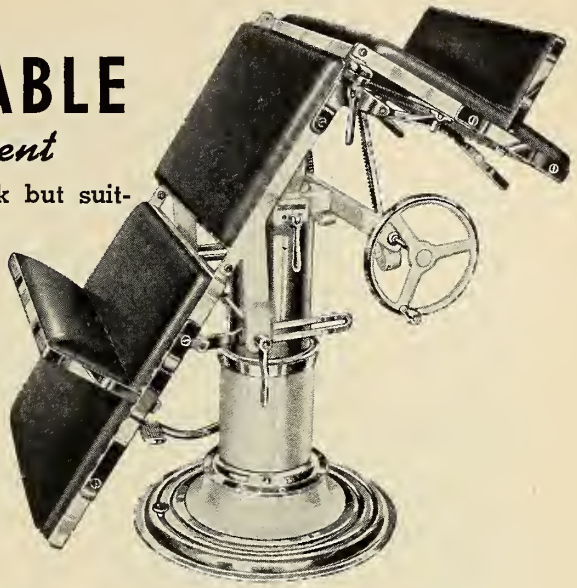
(Continued on Page 250)

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A Multi-Purpose Equipment

Primarily designed for proctological work but suitable for all treatment or examining uses.



The "Lexington" table offers a remarkable degree of tilt for sigmoidoscopic work. It permits the patient's weight to be supported by the thighs and arms so that pressure on the abdomen is relieved.

The broad, upholstered top is comfortable to the patient and is wide enough to accommodate him in the Sims position. The "Lexington" assumes all conventional treatment positions including the "chair." A removable, adjustable headrest is supplied for E. E. N. & T. Treatment. The smooth-operating hydraulic pump is foot-operated and provides an elevation of 11 inches.

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Potency of 0.5 mg. Bottles of 100.

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(Continued from Page 248)

The Wayne County Medical Society recently polled its membership with a questionnaire seeking the following information:

Are you in favor of the Wagner-Murray-Dingell Bill? Yes ☐ No ☐

Are you a general practitioner? Yes ☐ No ☐

Have you at any time served in the medical corps of the United States armed forces? Yes ☐ No ☐

In what congressional district do you vote? ————.

The signing of the post card was optional.

The covering letter stated "In order that the public, who are your patients, and the Congressmen, who are your representatives, may know how *you* stand, *you* must answer the enclosed questionnaire. The proponents of this legislation have publicly stated that only a reactionary minority of the medical profession oppose it."

* * *

A Half Ton of Tonsils

During the three-year period from April 1, 1942, to March 31, 1945, Michigan Medical Service paid for the removal of 43,492 pairs of tonsils. Estimate the weight yourself. During the same period there were 27,372 deliveries, and 17,170 appendectomies.

* * *

Some Figures

Up to December 31, 1945, Michigan Medical Service had paid to doctors $13,628,000.00. During the year 1945 the doctors received $4,143,000.00 for their services. This sounds like real service.

Research Grant

The Board of Education has accepted for Wayne University Medical School $500 to be used for research on multiple sclerosis at the College of Medicine. This project is under the direction of Dr. Gabriel Steiner, associate professor of neuropathology; also a grant of $1,200 from the American Medical Association for the continuation of research on urogastrone.

* * *

Cancer Symposium

A scientific program devoted entirely to the subject of Cancer, will be held in Merliss Brown Auditorium, Hurley Hospital, Flint, Michigan, on March 20, 1946.

The tentative program is as follows:

"Cancer of the Uterus"—Louis E. Phaneuf, M.D., Professor of Gynecology, Tufts College Medical School, Boston, Massachusetts.

"Cutaneous Malignancy"—Paul A. O'Leary, M.D., Chief of the Department of Dermatology, Mayo Clinic, Rochester, Minnesota.

"Cancer of the Genito-Urinary System"—Charles B. Huggins, M.D., Professor, Urology, University of Chicago Medical School.

"Cancer of the Stomach"—Frederick A. Coller, M.D., Professor of Surgery, University of Michigan Medical School.

"Cancer of the Breast"—Frank E. Adair, M.D., Clinical Director, Department of Surgery, Memorial Hospital, New York City, N. Y.

MSMS members are cordially invited to attend this

(Continued on Page 252)

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1 cc. and 3 cc.
Sterile Solution
30 cc. vials.



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THE laboratory is located in rooms 1551-1559 David Whitney Building.

AND is open daily from 9:00 A. M. to 5:30 P. M., except Sundays.

PATIENTS can be sent to the laboratory at any time during these hours.

WHERE patients cannot come to the laboratory a member of the staff will call and make what examinations are desired at an additional fee according to the distance.

MESSENGERS will gladly be sent to your office or to a patient's home to pick up specimens without charge.

SEROLOGICAL tests run daily except Sunday and the reports ready by 11:00 A. M. the following day.

ALL other tests reported as promptly as the nature of the specimen permits.

NO examinations made directly for a patient. All reports must go through the attending physician.

THE staff confines its entire attention to diagnostic work.

NO treatments ever administered to any patient.

OWEN CLINICAL LABORATORY

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Albert De Groat, B.S., M.D., Director

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(Continued from Page 250)

meeting. For final program, write George J. Curry, M.D., Chairman, Genesee County Medical Society Program Committee, Begole St., Flint, Michigan.

* * *

General Lull Leaves SGO FOR AMA

Major General George F. Lull, Deputy Surgeon General of the Army, whose notable record in that capacity won him the Distinguished Service Medal, the highest noncombatant award, has retired from the Army after 33 years of service with the Medical Corps.

General Lull will become Secretary and General Manager of the American Medical Association. He will take up his new duties officially in July, when the retirement of Dr. Olin West, the present Secretary and General Manager, becomes effective, but he will immediately join the staff of the American Medical Association to familiarize himself with the work of the organization.

* * *

AMA Voluntary Sick Insurance Plan

On February 15, 1946 the Board of Trustees and the Council on Medical Service and Public Relations announced preliminary plans for a nationwide system of voluntary non-profit sickness insurance to be administered by a newly formed subsidiary Associated Medical Care Plans, Inc. While premiums will vary in different parts of the country they will be much less than the projected Truman's compulsory health insurance program.

To display the Association's seal of approval they must have the approval of the state or county medical society; the medical profession in the area must assume responsibility for the medical services included in the benefits; they must provide for the free choice of doctor of medicine, and maintain the personal, confidential patient-physician relationship; they must be organized and operated to provide the greatest possible benefits to the subscribers. Benefits may be cash indemnity or units of medical service, including home, office and hospital calls.

Existing plans will be coordinated and reciprocity established. A central clearing house will be established at the AMA headquarters in Chicago.

This action following the directive of the House of Delegates now makes it possible to offer the nation a comprehensive voluntary non-profit substitute for the unAmerican, socialistic, compulsory and enormously expensive plan of the international labor group which the President and his friends Wagner, Murray and Dingell have adopted as their own. The program is already proposed by the Conference of Presidents and Other Officers, and is printed on page 48 of the January issue JMSMS.

* * *

Rheumatic Fever Control

The Michigan Rheumatic Fever Control program i another first for Michigan, and is stressed in this numbe of THE JOURNAL. The consultation and diagnosti center areas appear on page 160. Also three papers rea at the Michigan Rheumatic Fever Control Conferenc in Detroit September 19-20, 1945 are published on page 193, 197, and 202. Michigan State Medical Societ interest in this subject is active and is producing result

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Your prescription must be filled with scientific knowledge and skill. Naturally, it must be followed to the letter by an expert who knows the ingredients, their characteristics and how to blend them. The long experience of our pharmacists is assurance that your prescription will be filled here with skill and accuracy, using drugs of the specific potency required for correct results.

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When you buy Sealtest Milk, you are buying the very TOPS in *taste, purity,* and *wholesomeness.*

These fine qualities in Sealtest Milk—the true "Measure of Quality" are safeguarded at every step in our great modern dairy by Sealtest Quality Controls.

For extra benefits, we suggest Sealtest Vitamin D Homogenized Milk. It's our *nutritionally-improved* milk—with extra Vitamin D in every quart and with nourishing cream in every drop.

You can always depend on Sealtest Quality

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

YOUR CARE DURING PREGNANCY. Medical instructions for the mother-to-be. Ann Arbor: The Cadeuceus Press, 1945. Price $0.25 (minimum orders 20).

The material contained in this booklet is identified with that in use by the Department of Obstetrics of the University of Michigan, and was prepared by the staff of the University. The instructions given are full, sound, and will save the busy obstetrician hours of his valuable time in giving his patients advice as to a trying time in their lives. It is planned to provide these 32-page booklets, attractive and paper bound so the doctor may dispense them as he would other instructions or medications. They may be had in lots of 100 or more for $0.20, and the doctor may have his name inprinted for $2.00.

CLASSIC DESCRIPTIONS OF DISEASE. With Biographical Sketches of the Authors. By Ralph H. Major, M.D., Professor of Medicine, University of Kansas School of Medicine, Springfield, Illinois: Charles C. Thomas, 1945. Price $6.50.

In this volume of 641 pages the author has collected the original, or a translation into English of the original description of two hundred and eighty-seven clinical entities. There are George Dock's description of the first American diagnosis during life and postmortem proof of Coronary occlusion. Banting's first report of Insulin, Hieronymus Fracastorius' "De morbis contagiosis," Walter Reed's "The Etiology of Yellow Fever," William Eithering's account of The Introduction of Foxglove into Modern Medicine; John C. Otto's "Hemophilia. There are also brief accounts of the life of the authors. This is a third edition, and is of most unusual interest. One can brouse away in the past and learn many things he least expected about the growth of modern medicine, from the Papyrus Ebers and Hippocrates to our still living investigators.

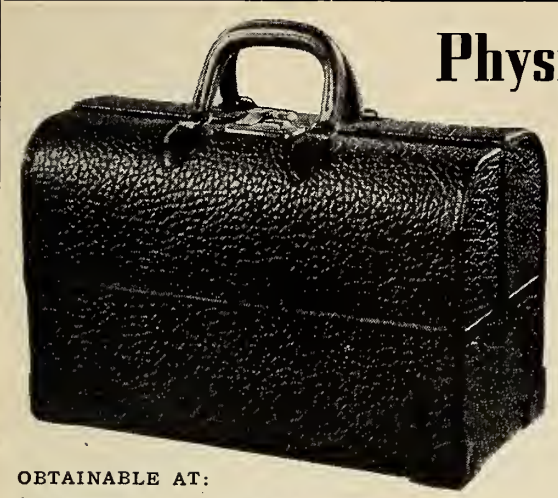
TEXTBOOK OF PEDIATRICS (Mitchell-Nelson). Edited by Waldo E. Nelson, M.D., Professor of Pedatrics, Temple University School of Medicine, with the collaboration of 49 contributors; 1,350 pages, 519 illus. Fourth edition, revised. Philadelphia: W. B. Saunders Company, 1945. Price, $10.00.

This textbook, while the fourth edition, based on the previous work of Griffith and Mitchell, is in reality a new book. It has many features which make it one of the most usable and readable sources of information to be added to the publications on pediatrics in many years. Forty-nine contributors, all specialists in their respective branches, assist in making this an up-to-date and authoritative text. The type is large, yet the work is condensed into one volume. Very little space is allotted to history and only those references retained which apply to the understanding of present problems. The charts, photographs, and x-ray plates are particularly good. Compre-

(Continued on Page 256)

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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

(Continued from Page 254)

hensive cross-references make the work especially valuable in obtaining details of a subject quickly. The first 210 pages deal with child development, nutritional requirements, and drug therapy. The discussion is as usable by the general practitioner and specialist as by the inexperienced student. The accepted indications, contraindications, and methods of use of the sulfonamides and penicillin are well presented. S.T.L.

* * *

MODERN UROLOGY FOR NURSES. By Sheila Maureen Dwyer, R.N., B.S., Director School of Nursing and Nursing Service Southampton Hospital, Southampton, N. Y., et cetera, and George W. Fish, M.D., Associate Professor of Urology, College of Physicians and Surgeons, Columbia University, New York City; With a Foreword by Helen Young, R.N., Director Emeritus, School of Nursing and Nursng Service, Columbia-Presbyterian Medical Center in the City of New York. Philadelphia: Lea & Febiger, 1945. Price $3.25.

The floor plan, personnel and equipment for a urological service are described in this little book. Lists of the various instruments and supplies needed for the examinations and treatments are given. The diseases and objectives in diagnosis are carefully and briefly outlined. The text is sufficiently full of detail, well oriented and will make an excellent guide for the nurse.

* * *

TAKE IT EASY. The Art of Conquering Your Nerves. By Arthur Gay Mathews. Twenty-six symbolical illustrations hy the author. New York: Sheridan House, 1945. Price $2.98.

Many of the ills to which the profession must give its best attention are ills of the mind, stimulated or guided, or controlled by the mental efforts of the patient. So many apparently grave disorders will respond to well-directed suggestion in the form of sugar pills. The necessary disederatum is to teach the patient nerve control. Take it Easy is easy to say, but methods are given in this entertaining little book. To the psychiatrist it should be a wholesome diversion. To the general practitioner it will stimulate so many thoughts that will help that he should read it.

* * *

CANCER OF THE COLON AND RECTUM: Its Diagnosis and Treatment. By Fred W. Rankin, B.A., M.A., M.D., Sc.D., F.A.C.S., Surgeon, St. Joseph's and Good Samaritan Hospitals, Lexington, Kentucky, and A Stephens Graham, M.D., M.S. (in surgery), F.A.C.S., Surgeon, Stuart Circle Hospital, Richmond, Virginia, Assistant Professor of Surgery, Medical College of Virginia. Springfield, Illinois: Charles C. Thomas, 1945. Price: $5.50.

The authors of this concise work are to be congratulated. All of the essentials of diagnosis and treatment, including choice of operation, are covered thoroughly. A good book for the general practitioner or the specialist.

A.M.G.

* * *

DISEASES OF THE NOSE, THROAT AND EAR: Edited by Chevalier Jackson, M.D., Sc.D., LL.D., F.A.C.S., Honorary Professor of Broncho-Esophagology, Temple University, Philadelphia; and Chevalier L. Jackson, M.D., M.Sc., F.A.C.S., Professor of Broncho-Esophagology, Temple University, Philadelphia. With the Collaboration of 64 Outstanding Authorities. 844 pages with 934 illustrations on 581 figures including 18 plates in color. Philadelphia and London: W. B. Saunders Company, 1945. Price $10.00.

As in all their other works the Jacksons have produced a masterpiece in this text. It is complete with every conceivable subject well covered. As would be expected half

(Continued on Page 258)





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(Continued from Page 256)

of the volume is devoted to the larynx and hypopharynx, the trachea and bronchi. Methods of diagnosis and treatment with the use of the direct laryngoscope and bronchoscope are profusely detailed. Illustrations are the last word. This book is a complete text and guide to exact and painstaking work in a field developed by the authors.

* * *

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Spring Quarter, beginning April 8, 1946

These courses are open to all qualified individuals.

Veterans should make arrangements for tuition and books as provided by the GI Bill, with the Veterans Counsellor at the College of Medicine.

Registration for these courses should be completed with the Director of Graduate Medical Education, at the College of Medicine **before April 3.**

BASIC SCIENCES

Title of Course	Place	Time	Fee
	Anatomy		
Regional Anatomy	College of Medicine	Arranged	$40
Advanced Histology	College of Medicine	Arranged	30
Endocrinology of Reproduction	College of Medicine	Mon. and Fri., 3-5	20
Problems in Neurology	College of Medicine	Thurs., 3-5	20
	Bacteriology		
Newer Bactericidal Agents	College of Medicine	Mon., 5-6	10
Pathogenic Mycology	College of Medicine	Fri., 1-4	30
Survey of Immunology and Serology	College of Medicine	Wed., 5-6	10
	Pathology		
Gynecologic Pathology	College of Medicine	Thurs., 1-5	30
Surgical Pathology	College of Medicine	Wed., 2-5	30
Neuropathology	College of Medicine	Fri., 1-4	30
Pathology of Neoplasms	College of Medicine	Mon. 1-5	30
Hematology	College of Medicine	Tues., 1-4	30
	Pharmacology		
Electropharmacology	College of Medicine	Arranged	10
Physical Medicine	Grace Hospital	Thurs., 1-5	30
Seminar in Pharmacology	College of Medicine	Fri., 4-5	10
Survey of Pharmacology	College of Medicine	Fri., 3-4	10
	Physiology		
Blood	College of Medicine	Tues., 4-6	20
Survey of Physiology	College of Medicine	Fri., 5-6	10
	Physiological Chemistry		
Seminar in Physiological Chemistry	College of Medicine	Wed., 4-5	10
Survey of Medical Chemistry	College of Medicine	Thurs., 5-6	10

CLINICAL SPECIALTIES

	Surgery		
Seminar in Surgery	College of Medicine	Thurs., 4-5	10
	Dermatology and Syphilology		
Graduate Conference in Venereal Diseases	Social Hygiene Clinic	Thurs., 3-4:30	20
Seminar in Dermatology	Receiving Hospital	Wed., 10-11:30	10
Dermatologic Clinic and Conference (4 weeks—limited to 5)	Receiving Hospital	Mon., 11-12 Wed., 10-12 Fri., 11-12	10
	Internal Medicine		
Medical Pathological Conference	Receiving Hospital	Fri., 11-12	10
Diagnostic Conference	Receiving Hospital	Sat., 11-12	10
Therapeutic Conference	Receiving Hospital	Thurs., 11-12	10
Medical X-ray Conference	Receiving Hospital	Tues., 11-12	10
Diagnostic Conference	Wayne County General	Wed., 4-5	10
Seminar in Internal Medicine	Wayne County General	Tues., 4-5	10
Medical Pathological Conference	Wayne County General	Thurs., 11-12	10
Electrocardiography	Wayne County General	Fri., 11-12	10
Medical X-ray Conference	Wayne County General	Fri., 1-2	10
Neurological Conference	Wayne County General	Tues., 10-11	10
	Proctology		
Refresher course (4 weeks)	Receiving Hospital	Tues., May 7, 8:00 A.M.	30
	Ophthalmology		
Basic Ophthalmology	College of Medicine		100



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You and Your Business

DUES OF MEDICAL VETERANS

1. The Michigan State Medical Society will remit the 1946 dues of all medical veterans who were members in good standing of any other state medical society and who transfer their membership to the Michigan State Medical Society in 1946. The arrangement for military members of the Michigan State Medical Society will apply in these cases.

2. The MSMS Council has also ruled that returning medical veterans, regardless of prior membership in the Michigan State Medical Society (because of their internship or residency or similar educational status) shall be accorded privileges as military members in the Michigan State Medical Society, with remission of dues. Their status is to be determined wholly on the date of their discharge from military service, certified by the county medical society in whose area they are practicing.

Listen! Augmented Michigan Radio Network
Every Tuesday, 8:15 P.M.
MSMS Commercial Radio Program!

MSMS ANNUAL SESSION, 1946

September 25, 26, 27, 1946, are the dates of the MSMS Annual Scientific Session this year.

The place will be the Book-Cadillac Hotel, Detroit.

The House of Delegates will convene one day earlier than usual, on Sunday, September 22, 8:00 P.M., and continue their deliberations through Monday and Tuesday, as necessary.

The Woman's Auxiliary of the Michigan State Medical Society will meet at the Statler Hotel on Wednesday and Thursday, September 25 and 26, 1946.

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MEDICAL BLANKS FOR VOCATIONAL REHABILITATION

Every client of Vocational Rehabilitation must have a basic medical report to establish his or her eligibility for service. Rehabilitation of disabled persons would be unsound in the extreme if not based upon competent medical diagnosis and proper treatment, according to B. H. Van Leuven, M.D., medical consultant of the State Vocational Rehabilitation Division. Thus it is apparent that the basic medical report is an important primary step in the client's rehabilitation. It is felt that many physicians do not understand the importance of completely filling out the blank. The form itself is short and the proper execution consumes but a small part of the physician's time.

The U. S. Senate Committee on Education and Labor has scheduled hearings on Senate Bill 1606, the Wagner-Murray-Dingell Bill (Socialized Medicine) to commence Tuesday, April 2. Hearings are expected to run for about thirty days.

The important item on the form is the diagnosis, the rest of the blank, with the exception of the laboratory tests, can be filled out by "yes" or "no" answers for the most part. Rehabilitation wants to know the physician's opinion regarding the possibility of the client's being rendered fit to take a job that will make him self-sustaining after physical restoration has been completed; rehabilitation wants to know the physician's opinion as to what physical restoration procedures should best be undertaken. The laboratory procedure required is simple—only a urine examination involving the specific gravity and the presence or absence of albumin and sugar, and estimation of the hemoglobin by a simple Tallqvist's test. This form is of the utmost importance to the client in establishing his eligibility to the services of Rehabilitation and in assuring adequate medical care.

The fee for filling out the blank is $5.00 and billing forms are furnished the physician along with the blank. Payment is prompt in each case upon receipt of the bill by the State Vocational Rehabilitation Division, Bauch Bldg., Lansing.

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(Continued on Page 280)



There is a Doctor in the House

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According to a recent nationwide survey:

More Doctors Smoke Camels

than any other cigarette

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

(Continued from Page 278)

MEDICAL FACULTY MEMBERS RETURN

Three members of the Wayne University College of Medicine faculty have resumed their positions after extended leaves of absence with the Army, Dean Hardy A. Kemp announced. Those back are Dr. James M. Winfield, Dr. Arthur W. Frisch, and Dr. Luverne H. Domeier.

Dr. Winfield, who has taken up his former post as associate professor of surgery, left the College of Medicine in October, 1942, with personnel of the 36th General Hospital, an organization composed of Wayne University staff members. Commissioned a lieutenant colonel in charge of the surgical service, Dr. Winfield spent over two years with his unit in both the Mediterranean and European Theaters. Prior to his discharge last fall, Dr. Winfield was appointed full colonel and decorated with the Legion of Merit and the Distinguished Unit Badge.

Dr. Frisch, associate professor of bacteriology and clinical pathology, received his discharge from the Army Medical Corps last month after serving in laboratory epidemiological research for over three years. Until April, 1945, he engaged in research at Percy Jones Hospital, Battle Creek, and then was transferred to the Army Epidemiological Board in Ann Arbor.

Dr. Domeier, who has returned as instructor in pathology, entered the Army in September, 1942. A captain in the Medical Corps, he was stationed for three years at Third Air Force hospitals in Louisiana and Florida.

Listen! Augmented Michigan Radio Network
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ASSOCIATED PRESS POLL OF CONGRESSMEN

The Associated Press, as reported by Science writer Carey, conducted a poll of the Congressmen just before the Christmas vacation asking this question:

> "Do you favor President Truman's proposal for a national prepaid 'health insurance' plan to be financed by additional social security taxes and by general government revenues?"

One hundred forty-one ballots were returned. Of these seventy-two voted "No"; forty-three voted "Yes"; seventeen were undecided; three were "non-committal" and six others gave qualified answers.

Of the seventy-five designated Republicans who returned ballots, only four expressed themselves in favor of the Truman proposal; nine were undecided; three were non-committal and one said that while he was against it at present, if modifications were made perhaps he would go along. Of the sixty-three designated Democrats, thirty-eight were for the proposal; twelve were opposed; eight were undecided and five gave qualified answers.

RADIO PROGRAM OF MICHIGAN STATE MEDICAL SOCIETY

Recently the Special Committee on Radio of the Michigan State Medical Society conducted two surveys on our radio program which has been broadcasted on Radio Station WJR for the past year at 6:30 P.M. each Friday.

The first survey was made by Commercial Services, Inc., a firm which makes a business of commercial radio polls.

This poll is done by having forty experienced telephone operators call as many people as they can while the program is on. These operators, who are not told who they are working for and omit all physicians from their calls asked the following questions:

1. Is your radio turned on?
2. To what radio station are you listening?
3. Who is the sponsor of the program?

Much to the surprise of our Radio Committee and Station WJR our rating was 9.6 which compares favorably with some of the National programs which have run for years and cost a lot more money. Some of these programs and their Hooper rating are as follows:

HOOPER RATING
May through September, 1945

Manhattan Merry Go Round	9.9
American Album Familiar Music	10.2
Morton Downey	1.8
Hour of Charm (eleven years)	10.8
Breakfast in Hollywood	11.4
Firestone Concert	9.2
Information Please	7.5
Chicago Breakfast Club	6.7
Lone Ranger	5.9
Kate Smith	11.6
Quizz Kids	9.8
Prudential Family Hour	5.6
Wayne King	9.3
Crime Doctor	10.5
James Melton	8.0
Double or Nothing	3.4
Frank Sinatra	10.6
Preston Slosson	10.0

The second survey was made by sending a two-way postcard to the membership of the MSMS. Of those who voted, 83.9 per cent were in favor of the program. Many also sent in constructive ideas for improving the program.

The new radio program started on Tuesday, March 5, 1946.

Time, 8:15-8:30 P.M.

WXYZ	Detroit
WLAF	Grand Rapids
WIBM	Jackson
WKBZ	Muskegon
WFDF	Flint
WSOO	Sault Ste. Marie
WDBC	Escanaba
WBCM	Bay City
WDMJ	Marquette
WELL	Battle Creek
WJMS	Ironwood
WTCM	Traverse City
WJIM	Lansing (10:00-10:15 P.M.)

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POTENTIATED ANTIBACTERIAL POTENCY
urea-sulfanilamide mixture more effective than either drug used independently.[1] Not inhibited by pus.

BETTER TISSUE DIFFUSION
more active diffusion of sulfanilamide through living and dead tissues due to urea content.[2]

INCREASED PHYSIOLOGIC DEBRIDEMENT
local therapy with urea in chronic otitis media brings about "a more adequate removal of the gross and microscopic debris in the recesses of the middle ear."[3]

WIDE FIELD
effective in BOTH acute AND chronic otologic infections. Active against sulfonamide-resistant bacteria.[4]

WELL TOLERATED
freedom from alkalinity virtually obviates local irritation.

ANALGESIC
provides effective chlorobutanol analgesia without impaired sulfonamide activity.

White's Otomide presents a stable, non-irritating solution of sulfanilamide, urea and chlorobutanol in a glycerin vehicle of unusually high hygroscopic activity.

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FORMULA

SULFANILAMIDE	5%
CARBAMIDE (urea)	10%
CHLOROBUTANOL	3%
GLYCERIN (high sp. gr.) q. s.	

1. *Tsuchiya, H. M., et al.: Proc. Soc. Exp. Biol. and Med., 50:262, 1942.*

2. *McClintock, L. A. and Goodale, R. H.: U. S. Naval Med. Bull., 41:1057, 1943.*

3. *Mertins, P. S. Jr.: Arch. Otolaryng., 26:509, 1937.*

4. *Strakosch, E. A. and Clark, W. G.: Minn. Med., 26:276, 1943.*

It's The Law, Doctor!

Juris ignorantia est, cum jus nostrom ignoramus—Old Maxim

NOTES ON COURT DECISIONS, STATUTES AND OTHER AUTHORITIES

J. JOSEPH HERBERT, LL. B., General Counsel MSMS
Manistique, Michigan

NURSES—DELEGATION OF AUTHORITY—INTRAVENOUS INJECTION OF DRUGS

Recently J. C. Droste, M.D., Secretary of the Executive Committee of Saint Mary's Hospital, Grand Rapids, Michigan, requested the writer's opinion relative to the following question: "How far may a hospital go in delegating to nurses the intravenous injection of drugs?" As I thought this subject might be of general interest to the medical profession, the opinion rendered is quoted below.

"Although a hospital may require the nurses on its staff to be trained and qualified to give intravenous injections, it is well known that a hospital may not 'delegate' the administering of drugs to patients by such methods, or any other. That authority, of course, rests exclusively with physicians. We shall therefore assume the real question to be whether nurses may on instruction of physicians lawfully give intravenous injections of drugs to patients at the hospital.

"Section 14.690, Michigan Statutes Annotated, defines the term 'registered nurse' as follows:

"Unless otherwise provided in this act the term 'registered nurse' is defined as one who has been authorized by the state to nurse or administer to the sick or those afflicted with any human ailment, defect, or complaint, whether of physical or mental origin, by attendance or advice or by the use of any therapeutic agent, under the supervision and direction of a registered physician."

"Inasmuch as the statute clearly gives the nurse authority to use 'any therapeutic agent' in administering to the sick, we need only examine her right to use the agent by means of intravenous injection.

"The statute contains no limitation on the method of use. The obvious reason for such lack of limitation is to be found in the provision that the right of a nurse to administer therapeutic agents may be exercised only under supervision and direction of a registered physician.

"A similar question, as to the right of a nurse to administer anaesthetics, was in 1939 referred to the Attorney General of Michigan for opinion. In holding that a nurse may legally give anesthetics under the supervision and direction of a registered physician, the Attorney General had reliance on the section of statute above quoted, and on the general practice in many noted hospitals by eminent surgeons of allowing nurses to administer anaesthetics.

"See Biennial Report of the Attorney General 1939-40, Page 308.

"It is common knowledge that the use of therapeutic agents has changed and advanced with discoveries of new and superior agents and methods for the alleviation of human ailments. Over the years the training and duties of nurses have generally kept pace with the uses of these new agents and methods, so that today nurses commonly administer many therapeutic remedies unheard of but a few years ago.

"There is nothing novel or unusually dangerous in making intravenous injections generally. Indeed, as Dr. Droste points out in his letter, 'Nurses have always been permitted to administer sedatives and opiates hypodermically and many of them have been trained to do the intravenous injection of whole blood, plasma, glucose and saline solutions.'

"It is my opinion therefore, that registered nurses may lawfully administer drugs by intravenous injections under the supervision and direction of registered physicians.

"In this connection it should be borne in mind, however, that there is a duty on part of the hospital and the physician to use reasonable care in selecting nurses who are qualified to administer drugs in such manner."

CORRECTION

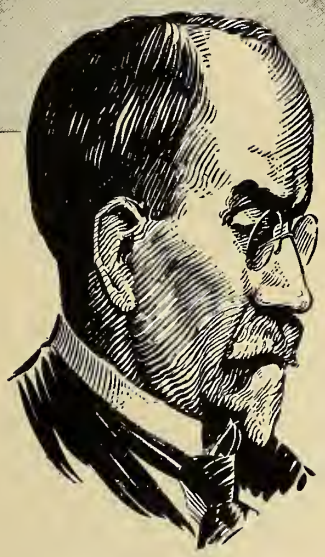
Central Lake, Michigan, has a physician, Don Hastings Duffie, M.D., who has practiced there for the past twenty years.

Kalkaska, Michigan, also has a physician, H. V. Hendricks, M.D., who has practiced there for many years.

The list on page 212 of the February JMSMS indicating "Areas With No Physicians" included Central Lake and Kalkaska. These names were reported in error.

JOUR. MSMS

MASTER BUILDERS *of* ENDOCRINOLOGY



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> *"to develop information . . . and to materialize the means whereby this may be applied."*

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AMA Offers Voluntary Medical Care Plan for United States

The Board of Trustees of the American Medical Association, at an epochal meeting in Chicago on February 12, announced the development of a nation-wide voluntary plan of prepaid group medical care.

The voluntary sickness insurance plan (not socialized medicine) is built around locally administered medical care plans already existing in twenty-five states. It provides for free choice of doctors.

The AMA Board of Trustees also established a division of Prepayment Medical Care Plans under the Council on Medical Service.

This division will consist of a director and staff to work with the various state and county societies in developing plans anywhere in the forty-eight states of the Union. The staff personnel will be experienced in all phases of organization and operation of the various types of medical care plans.

1. Any medical-care plan which meets standards set by the AMA's Council on Medical Service and is approved by the local state or county medical society may display the seal of acceptance of the American Medical Association.

2. The medical profession in the area must assume responsibility for the medical services included in the benefits. Plans must be operated to provide the greatest possible benefits in medical care to the subscriber.

3. A voluntary federation known as Associated Medical Care Plans, Inc., was organized to coordinate all plans that meet the AMA council's minimum standards.

Sixty-two plans featuring voluntary prepayment medical care and approved by state and county medical societies already exist in the United States. They are:

Alabama Hospital Service Association
Birmingham, Alabama

California Physicians' Service
San Francisco, California

Hospital Service of California
Oakland, California

Intercoast Hospitalization Insurance Association
Sacramento, California

Colorado Medical Service, Inc.
Denver, Colorado

Connecticut Medical Service
New Haven, Connecticut

Delaware Medical Care Plan
Wilmington, Delaware

Group Hospital Service, Inc.
Wilmington, Delaware

Iowa Medical Service
Des Moines, Iowa

Kansas Physicians' Service
Topeka, Kansas

Hospital Service Association of New Orleans
New Orleans, Louisiana

Massachussetts Medical Service
Boston, Massachusetts

Michigan Medical Service
Detroit, Michigan

Surgical Care, Inc.
Kansas City, Missouri

Missouri Medical Service
St. Louis, Missouri

Nebraska Surgical Plan
Omaha, Nebraska

New Hampshire Physicians' Service
Concord, New Hampshire

Medical-Surgical Plan of New Jersey
Newark, New Jersey

Western New York Medical Plan, Inc.
Buffalo, New York

United Medical Service, Inc.
New York, New York

Central New York Medical Plan, Inc.
Syracuse, New York

Medical and Surgical Care, Inc.
Utica, New York

Hospital Saving Association of N. Car.
Chapel Hill, North Carolina

Medical Service Association, Inc.
Durham, North Carolina

Hospital Care Association
Durham, North Carolina

Medical Mutual of Cleveland, Inc.
Cleveland, Ohio

Ohio Medical Indemnity, Inc.
Columbus, Ohio

Community Surgical Plan
Toledo, Ohio

Oklahoma Physicians Service
Tulsa, Oklahoma

Pacific Hospital Association
Eugene, Oregon

(Continued on Page 310)

"...sulfathiazole gum provides a method of chemotherapy for oropharyngeal use and is topical in a strict sense of the term, as shown by the extremely low blood levels of sulfathiazole resulting from intensive dosage with the preparation."

—FOX, NOAH, ET AL.: EFFECT OF SULFATHIAZOLE IN CHEWING GUM IN CERTAIN OROPHARYNGEAL INFECTIONS, ARCH. OF OTOLARYNGOLOGY, *41*:278-283 (APRIL) 1945.

When a single tablet of pleasantly flavored Sulfathiazole Gum is chewed for one-half to one hour it provides a high salivary concentration of locally active sulfathiazole averaging 70 mg. per cent. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually obviated.

INDICATIONS: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis—septic sore throat—infectious gingivitis and stomatitis — Vincent's infection. Also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

DOSAGE: One tablet chewed for one-half to one hour at intervals of one to four hours, depending upon the severity of the condition.

If preferred, several tablets—rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes

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Forty-Two States Represented at Chicago Conference of Presidents

When President A. S. Brunk, M.D., Detroit, convened the First Annual Conference of Presidents and Other Officers of State Medical Associations in Chicago on December 2, 1945, 208 registrants from forty-two states were present.



PRESIDENTS-ELECT OF STATE MEDICAL SOCIETIES AT CHICAGO CONFERENCE OF PRESIDENTS, DECEMBER 2, 1945

(Seated): C. M. Hamilton, M.D., Tennessee; R. L. Parker, M.D., Iowa; E. G. Johnson, M.D., Nebraska; R. H. Chaney, M.D., Georgia; F. G. Scammell, M.D., New Jersey. (Standing): S. J. McClendon, M.D., California; C. B. Gibson, M.D., Connecticut; W. A. Hyland, M.D., Michigan; Ross Wright, M.D., Washington; J. K. Avent, M.D., Mississippi.

This significant effort in medical public relations bore rich fruit. Its four resolutions on (a) Expansion of Medically-Sponsored Voluntary Group Health Care Programs; (b) On Modern Medical Public Relations; (c) On Formation of a National Health Congress; and (d) On Health Legislation Beneficial to the People were approved three days later by the House of Delegates of the American Medical Association. By-Laws, making the Conference of Presidents a permanent organization, were adopted. The State of Michigan and Dr. Brunk were honored by his election as the First President of the Conference of Presidents and Other Officers of State Medical Associations.

A list of those attending the Chicago Conference of Presidents includes:

Irvin Abell, M.D., Louisville, Kentucky; A. W. Adson, M.D., Rochester, Minnesota; Dwight Anderson, New York, New York; George Anderson, M.D., Spokane, Washington; W. P. Anderton, M.D., New York, New York; E. Vincent Askey, M.D., Los Angeles, California; James K. Avent, M.D., Grenada, Mississippi.

John L. Bach, Chicago, Illinois; H. Martin Baker, Wichita, Kansas; Creighton Barker, M.D., New Haven, Connecticut; W. H. Battleson, Kansas City, Missouri; William Bates, M.D., Philadelphia, Pennsylvania; Louis H. Bauer, M.D., Hempstead, New York; Jacob J. Berman, M.D., Trenton, New Jersey; R. D. Bernard, M.D., Clarion, Iowa; Walter S. Bierring, M.D., Des Moines, Iowa; P. E. Blackerby, M.D., Louisville, Kentucky; James R. Bloss, M.D., Huntington, West Virginia; F. F. Borzell, M.D., Philadelphia, Pennsylvania; John S. Bouslog, M.D., Denver, Colorado; James Boyle, Washington, D. C.; A. A. Brindley, M.D., Toledo, Ohio; W. R. Brooksher, M.D., Fort Smith, Arkansas; John W. Brownlee, Rutland, Vermont; A. S. Brunk, M.D., Detroit, Michigan; A. S. Bristow, M.D., Princeton, Missouri; Louis A. Buie, M.D., Rochester, Minnesota; W. A. Bunten, M.D., Cheyenne, Wyoming; Alex M. Burgess, M.D., Providence, Rhode Island; C. Charles Burlingame, M.D., Hartford, Connecticut; Wm. J. Burns, Lansing, Michigan; W. L. Burnap, M.D., Fergus Falls, Minnesota; John F. Burton, M.D., Oklahoma City, Oklahoma.

Mac F. Cahal, Chicago, Illinois; C. L. Candler, M.D., Detroit, Michigan; Donald Cass, M.D., Los Angeles, California; Ralph H. Chaney, M.D., Augusta,

(Continued on Page 290)

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(Continued from Page 288)

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(Continued on Page 415)

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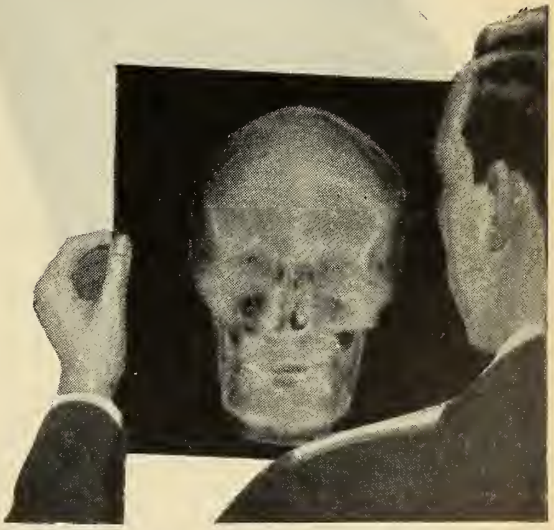
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Program of Health Legislation Beneficial to the People

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore be it

RESOLVED, That the following principles for a health legislation program be adopted:

1. Establishment in the President's Cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians, and under whose jurisdiction every federal bureau and office, whose duties are related to health and medical welfare, shall be grouped.

2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care by government grants-in-aid.

3. Provide federal or state loans, or guarantees of private loans, for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled, and carried on by those who own such facilities and by the medical profession.

4. (a) Establish state-wide voluntary non-profit health care programs, in every state, based on the free choice of purveyors of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractual arrangement for payment of charges from county, state or federal funds; as a service plan for all other governmental categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law.
   (b) Any further federal or state programs for expansion of medical service to be developed within the structure of the above-described program.
   (c) National co-operation with the proposed plans of Major General Paul R. Hawley of the Veterans Administration in the therapeutic administrations to veterans for service-connected disabilities. Also for the development of veteran facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments.
   (d) All state-wide medical care programs on either a service or indemnity care basis shall be incorporated under special state-enabling acts or by already existing state statutes relating to non-profit producers' co-operatives. This will provide for either a prepayment or a reimbursement contractual service.
   (e) Group co-operation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) programs, should be accomplished.

5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to advise all the people with respect to proven measures to prevent illness, hygienic and sanitary measures, and where to go to seek help when ill or injured.

6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans, and be it further

RESOLVED, That every state medical society be invited to study, adopt and activate these principles on the state level, and that they be submitted to the AMA Council on Medical Service and Public Relations for immediate consideration as a pattern for a national health program.

Adopted by Conference of Presidents and other Officers of State Medical Societies, December 2, 1945; referred by 1945 AMA House of Delegates to the AMA Council on Medical Service and Public Relations, December 5, 1945.



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MSMS Annual County Secretaries Conference

January 20, 1946

A total of one-hundred fifty-seven attended the Annual County Secretaries Conference of the Michigan State Medical Society held at the Wardell-Sheraton Hotel on January 20, 1946. Unanimous was the praise for an intensely interesting and enlightening program over which G. B. Saltonstall, M. D., Charlevoix, presided.

The meeting opened with a "Progress Report on Michigan Medical Service" presented by R. L. Novy, M. D., Detroit, President of MMS. This was followed by a trip from the Wardell-Sheraton Hotel to Michigan Medical Service and a tour of the headquarters of Michigan's voluntary group medical care plan, in operation.

Colonel J. C. Harding, M.C., representative of Major General Paul R. Hawley, M.C., of the Veterans Administration, Washington, D. C., spoke on "The Program of Medical Care of the U. S. Veterans Administration."

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, presented facts on the "Uniform Fee Schedule for Governmental Agencies."

E. I. Carr, M.D., Lansing, President of the Michigan Foundation for Medical and Health Education, Inc., spoke on the "Aims and Purposes of the Health Foundation."

E. J. McCormick, M.D., Toledo, Chairman of the AMA Council on Medical Service and Public Relations, spoke on "Medical Public Relations" and gave an enlightening account of the progress and aims of his Council.

The round-table discussion was led by S. W. Insley, M.D., Detroit, President of the Wayne County Medical Society.

Dr. Saltonstall was re-elected as Chairman of the Conference for the ensuing year, by unanimous vote.

The thirty-three County Secretaries present at the Conference were:

U. M. Adams, M.D., Cass; J. K. Altland, M.D., Barry; M. P. Bates, M.D., Hillsdale; Harry Berman, M. D., Tuscola; E. W. Blanchard, M.D., Sanilac; J. Russell Brink, M.D., Kent; A. L. Callery, M.D., St. Clair; E. S. Carr, M.D., Chippewa-Mackinac; Ray M. Duffy, M.D., Livingston; M. R. French, M.D., Van Buren; H. H. Gay, M.D., Midland; J. Bates Henderson, M.D., Huron; L. Dell Henry, M.D., Washtenaw; T. Y. Ho, M.D., Clinton; K. H. Johnson, M.D., Ingham; W. S. Jones, M.D., Menominee; G. J. Kemme, M.D., Ottawa; Felix J. Kemp, M.D., Oakland; R. Bruce Macduff, M.D., Genesee; J. E. Mahan, M.D., Allegan; Don Marshall, M.D., Kalamazoo; W. S. Martin, M.D., Mason; J. J. McCann, M.D., Ionia-Montcalm; H. R. Moore, M.D., Newaygo; A. P. Murphy, M.D., Saginaw; E. S. Parmenter, M.D., Alpena; G. T. Patrick, M.D., Calhoun; H. W. Porter, M.D., Jackson; G. B. Saltonstall, M.D., Northern Michigan; L. G. Sevener, M.D., Eaton; Stanley A. Stealy, M.D., North Central Counties; Gordon Tornberg, M.D., Wexford; D. Bruce Wiley, M.D., Macomb. Executive Secretaries Sara M. Burgess, Genesee; and Else Kolhede, Wayne.

Presidents of County Medical Societies who attended were:

A. B. Bower, M.D., Macomb; D. R. Brasie, M.D., Genesee; C. G. Darling, Jr., M.D., Oakland; W. L. Howard, M.D., Calhoun; S. W. Insley, M.D., Wayne; David M. Kane, M.D., St. Joseph; C. L. Weston, M.D., Shiawassee; J. J. Woods, M.D., Washtenaw; H. B. Zemmer, M.D., Lapeer.

Representatives of the Woman's Auxiliary, totalling twenty, were present:

Mrs. R. H. Alter, Jackson; Mrs. T. G. Amos, Wayne; Mrs. Chas. J. Barone, Wayne; Mrs. F. G. Buesser, Wayne; Mrs. A. L. Callery, St. Clair; Mrs. Lloyd A. Campbell, Saginaw; Mrs. Lloyd C. Harvie, Saginaw; Mrs. Robert Jaenichen, Saginaw; Mrs. D. M. Kane, St. Joseph; Mrs. Wm. B. Kerr, Saginaw; Mrs. R. Bruce Macduff, Genesee; Mrs. W. MacKersie, Wayne; Mrs. Don Marshall, Kalamazoo; Mrs. G. L. McClellan, Wayne; Mrs. Harold A. Miller, Ingham; Mrs. R. S. Morrish, Genesee; Mrs. R. L. Novy, Wayne; Mrs. A. C. Pfeifer, Genesee; Mrs. R. C. Pochert, Shiawassee; Mrs. L. Paul Sonda, Wayne; Mrs. O. D. Stryker, Newaygo; Mrs. Wm. L. Sherman, Wayne.

MSMS Officers who attended included:

President, R. S. Morrish, M.D., Secretary, L. Fernald Foster, M.D., Treasurer, A. S. Brunk, M.D., Speaker, P. L. Ledwidge, M.D., and Councilors, W. E. Barstow, M.D., O. O. Beck, M.D., T. E. DeGurse, M.D., Fred Drummond, M.D., W. H. Huron, M.D., R. C. Pochert, M. D., E. F. Sladek, M.D., O. D. Stryker, M.D., C. E. Umphrey, M.D., E. R. Witwer, M.D., and Past Presidents, L. J. Hirschman, M.D., and J. M. Robb, M.D., both of Detroit.

Editors present were:

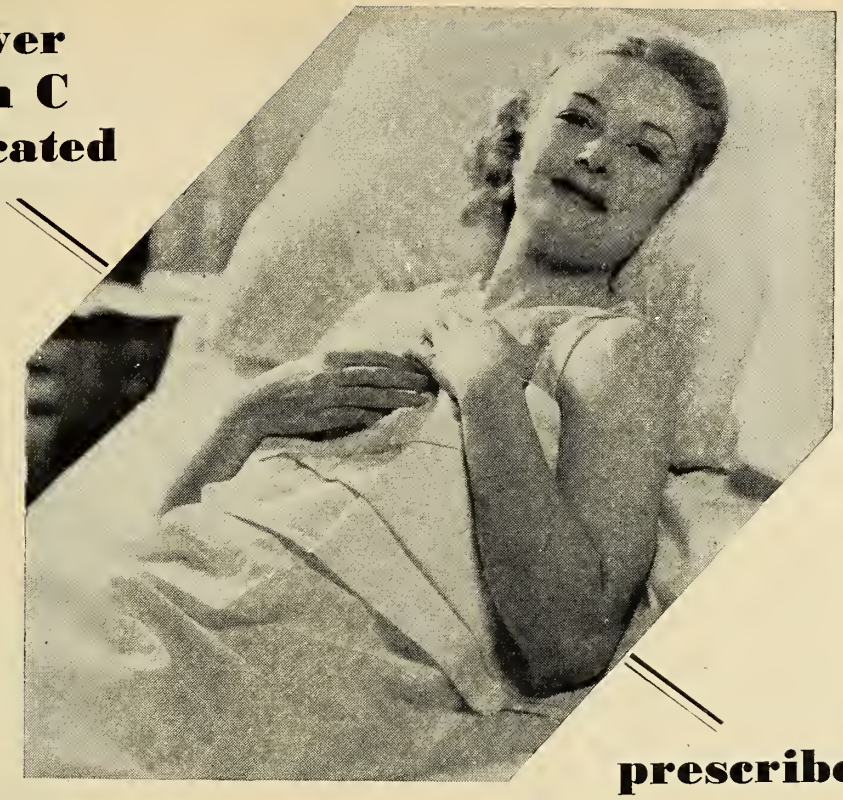
Wilfrid Haughey, M.D., JOURNAL of the Michigan State Medical Society; J. S. Lambie, M.D., Oakland County Bulletin; J. J. Lightbody, M.D., Detroit Medical News; A. C. Pfeifer, M.D., The Bulletin, Genesee County; and Associate Editor John M. Markley, M.D., Oakland County Bulletin.

Others who attended included:

V. C. Abbott, M.D., Pontiac; Major A. D. Alguire, Lansing; Percy C. Angove, Detroit; Chas. J. Barone, M.D., Highland Park; Joseph J. Bauser, Detroit; H. M. Best, M.D., Lapeer; R. J. Borer, M.D., Toledo, Ohio; W. H. Boughner, M.D., Algonac; H. W. Brenneman, Lansing; Thelma Brewington, Lansing; C. L. Candler, M.D.,

(Continued on Page 380)

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The Grand Rapids Press Comments on Michigan Medical Service

State Medicine Unnecessary

Phenomenal growth of the Michigan Medical Service, as reported to the state public health conference now in session in Grand Rapids, shows the great good that can be accomplished under an efficiently administered voluntary health insurance plan that sells itself to the public on its own merits. The response in Michigan proves conclusively that, given an opportunity to provide for their own medical needs on a thrifty small-payment plan, individuals and heads of families will virtually "eat it up." And state after state, where these "blue cross" plans are expanding, is adding new evidence of their worth.

It is axiomatic that social security never goes backward. In our humanitarian society, public opinion undoubtedly favors its gradual extension on a sound basis. What form that extension is to take is a decision this country will have to make when congress comes to grips with the Murray-Wagner-Dingell social security bill. Included in the "cradle-to-grave" security provided in that bill is a proposal for state medicine that would cost the taxpayers an estimated $1,750,000,000 annually. The fate of this measure will decide whether we are to have government-sponsored health insurance with its tremendous administrative problems and bureaucratic evils or whether we are to preserve the American system of individual responsibility and self-reliance.

It has perhaps escaped the notice of the average American that the United States government has for a generation conducted an experiment in state medicine through its care of ill or disabled veterans of the first World War. Nominally there have been some restrictions based on the veteran's condition and his ability to pay, but in practice the government pays. Recent investigations by congressional committees and servicemen's organizations have revealed serious abuses. Medical service in the veterans' hospitals has been rated "poor to average." It has been shown that the government service has not attracted a high quality of professional talent; has not encouraged experimental research and scientific progress in new methods of treatment; and in general has been inefficiently operated. Sweeping reforms are demanded as the government prepares to extend the service to veterans of this war. Surely that object lesson should stand as a warning against the extension of government-paid medical service to the families of America.

Advocates of state medicine challenge its opponents to produce an alternative that will make competent medical treatment available to the masses. Obviously, as the old saying goes, "you cannot beat something with nothing." But you can beat something with something better—and the Michigan Medical Service, which offers its subscribers an economical group plan for paying for their own medical care and the opportunity to choose their own physician instead of taking whatever the government would provide under the dole—seems to point the way to that "something better." Obviously the coverage in this state would not have increased 800 per cent in five years if satisfied patients had not recommended the service to their friends and fellow workers.

Michigan can well be proud of the fact that it was a pioneer among the states in the setting up of a medical service plan and that no other state has such extensive coverage. The success of the experiment is something to cheer about. Here is concrete proof that state medicine a la Murray-Wagner-Dingell is as unnecessary as it would be dangerous to the American philosophy of the individual's relation to his government.

As Mr. Ketchum, executive of the Michigan Medical Service, pointed out in addressing the public health group, the American people should understand that any system of government health insurance, once undertaken, would inevitably be permanent. The opportunities it would furnish for political patronage would be so enormous that the politicians could never be persuaded to give it up. The country would be saddled with another sprawling bureaucracy that would top anything we have yet experienced. But if the public demand that good medical care be made available to everyone becomes insistent enough, government will step in to provide it unless private initiative does the job through voluntary methods.

Michigan, by trying the voluntary plan and

(Continued on Page 347)

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Veterans Administration Contract With Michigan Medical Service

So many requests have been received for a copy of the salient points of the contract of December 27, 1945, for "home-town medical care of veterans" in Michigan, that the important paragraphs of this document between the Veterans Administration and Michigan Medical Service are printed, as follows:

The Michigan Medical Service agrees to make available during the fiscal year ending June 30, 1946, all services outlined below in accordance with the terms and conditions hereinafter prescribed:

(1) The Michigan Medical Service will arrange, through physicians registered with it for the rendition of the medical services covered by this agreement, for examinations, treatments and counsel in such cases as may be authorized by the Veterans Administration, Michigan Medical Service reserving the right, however, to decline any particular case.

(2) The Veterans Administration will authorize examinations, treatments and counsel. Authorizations for such services will be issued to the Michigan Medical Service; the Michigan Medical Service will advise the veteran to report to a physician of the veteran's selection in his community, such selection to be limited to those physicians registered with the Michigan Medical Service for the rendition of services under this agreement.

(3) The Michigan Medical Service will be responsible to see that reports required by the Veterans Administration are in proper form and that proper records are maintained which will be available for review by the Veterans Administration at any time. The Veterans Administration will review reports of services and will return to Michigan Medical Service for further action, without additional cost to the Veterans Administration, those which do not meet the requirements of the Veterans Administration.

(4) Fees for medical services will be in accordance with the fee schedule, which is attached hereto and made a part of this contract. It is understood that unusually involved cases and services not scheduled will be subject to review and recommendation by Michigan Medical Service to the Veterans Administration for determination of appropriate fee.

(5) The Michigan Medical Service will make payment to the individual physicians for services rendered on all cases in which authorizations have been issued and will in turn bill the Veterans Administration at the end of each month. Veterans Administration will remit in accordance with such bill within a reasonable time after receipt thereof.

(6) The Michigan Medical Service contemplates that the performance of this contract will be without profit to it and if operating results are at variance with this intention revisions will be proposed to produce such a non-profit operation.

The Michigan Medical Service warrants that the rates charged herein are not in excess of the rates charged other persons, who are not Veterans Administration beneficiaries for the same services.

It is impossible to determine the exact or estimated amount which will be expended under this contract. However, it is understood that upon acceptance of this proposal, the Veterans Administration will issue authorizations for such services as are necessary and Michigan Medical Service will carry out its undertaking hereunder.

This contract shall become effective as of January 15, 1946, and may be terminated by either party by giving thirty (30) days written notice to that effect.

This contract, if mutually satisfactory, may be renewed indefinitely for periods of one (1) year each, upon notice in writing to the contractor at least sixty (60) days prior to the expiration of each period of one (1) year, and written statement from the contractor within thirty (30) days after such notification agreeing to the renewal.

NOTICE TO BIDDERS—Prices bid should include any applicable federal excise taxes, as the United States is not exempt from payments of such taxes.

No member of or delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract or to any benefit that may arise therefrom unless it be made with a corporation for its general benefit.

Michigan Medical Service agrees that in performing this contract it will not discriminate against any employe or applicant for employment because of race, creed, color or national origin, and that it will include a similar provision in all of its subcontracts.

MICHIGAN MEDICAL SERVICE

By:.....

.....

(Title)

APPROVED AND ACCEPTED.
VETERANS ADMINISTRATION

.....

R. C. KIDD

Director of Supplies

.....

(If bidder is a corporation, Form 1264 must be filled out and attached to the contract)

(The part of this contract from "Notice to bidders" is standard form in all contracts to which the government is a part.—Editor).

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Medical Veterans' Readjustment

HOME-TOWN TREATMENT

The *New York Times* for January 6, 1946, published an article by Howard A. Rusk, M.D., calling attention to the test plan in Michigan. We quote freely from the article. Its exposition of the problem of the veteran is excellent.

The medical services of the Veterans Administration took a long step in demonstrating how this can be achieved this past week when they announced an arrangement under which Michigan war veterans may receive "home-town" medical care by doctors of their own choice at Government expense.

This plan is frankly a trial run, but if it works satisfactorily, officials of the Veterans have said that it would be extended to other States.

Michigan was chosen for the test because of the splendid record and co-operation of the Michigan Medical Service. This organization, operated by the Michigan State Medical Society, has had more than five years' experience and now has about 875,000 subscribers to a voluntary health insurance plan with about 3,000 doctors participating in the service.

The Veterans Administration has not insured the individual veteran as the civilian subscriber has been covered in the Michigan plan, but is purchasing the service from the Michigan Medical Service, which, in turn, will pay the doctor who gives the professional care.

The plan does not include hospitalization at present, but this is expected to be the next step. When this is done the veteran with a service-connected disability will receive both outpatient care and hospitalization in his own community, provided such hospitals belong to the approved Statewide participating group.

For many years Veterans Administration hospitals admitted only men with disabilities growing out of military service. But in the Nineteen Thirties, with a number of beds unoccupied, the law was amended to permit care of veterans with sickness and disabilities not caused directly by military service, if bed space was available and the veteran signed a statement to the effect that he was unable to pay for private medical care.

The primary purpose of the new Michigan plan is to ease that critical pressure on Veterans Administration hospitals, for under the new system many veterans with service-connected disabilities may be treated in their own home towns, thus releasing critical beds in Veterans Administration hospitals and making available the necessary room for the expanding medical and rehabilitation programs.

Equally important and perhaps even more far reaching in final implications is the effect of "home-town" treatment in reducing the period of hospitalization. Veterans now are frequently kept in the hospital until total recovery to permit observation during convalescence.

It may well be that the Michigan experiment will revise the whole operating philosophy of the Veteran Administration's medical service. If it is successful, each veteran might receive a comprehensive medical insurance policy which would take care of his ordinary medical needs. The present Veterans Administration hospitals then could be used for domicilary and highly specialized medical care.

This is a real step in the right direction toward reintegration of the veteran into his community, a move toward a realization by every man who has experienced military service that he is a citizen first and veteran second.

HOME-TOWN HOSPITAL SERVICE FOR VETERANS

Michigan's pioneering program providing for "home-town" medical and hospital care of veterans with service-connected disabilities will be in operation by about May 1, was announced by W. H. Lichty, executive director of Michigan Hospital Service, the Blue Cross Plan.

The new program, designed to help relieve the great demands upon the regular Veterans Hospitals, will authorize veterans to go to any registered doctor or hospital when care or treatment in a Veterans' institution is not "feasibly available."

Upon the veteran's application for service-connected treatment or care, the Veterans Administration will determine whether the case is to be handled in the Veterans facility or whether the veteran is to be authorized to receive service from a local doctor or hospital.

It is expected that thousands of veterans will be able to receive needed services from the hospitals and doctors of their own choice through the new program.

The contract providing for local hospital care was signed between the Veterans Administration and Michigan Hospital Service, January 31, 1946. It follows by a month the signing of a contract between the Veterans Administration and Michigan Medical Service, companion organization to Michigan Hospital Service.

"We will not know which hospitals will be participating in this program or how many beds they will be able to make available until we have contacted all the hospitals individually," Lichty explained.

"On the basis of our advance contacts with the hospitals, however, we believe that practically all of them plan to register to provide service to the veterans. We hope that we shall have a fairly complete list by May 1."

About half of Michigan's practicing physicians already have registered to provide medical services to the veterans, and hundreds of additional registrations are coming in each week, according to J. C. Ketchum, executive vice president of Michigan Medical Service.

Under the new program when it goes into operation, veterans with service-connected disabilities will make

(Continued on Page 302)



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HOME TOWN HOSPITAL SERVICE

(Continued from Page 300)

application for care to the nearest Veterans Administration contact representative, as usual.

If care by a local doctor or hospital is authorized, the authorization will be issued to Michigan Hospital Service and Michigan Medical Service, which organizations will furnish it immediately to the veteran along with lists of the registered doctors and hospitals in his community. The veteran then can make his own choice of the doctor and hospital he wishes to use.

Special procedures are being developed for emergency cases so that medical or hospital services can be made available immediately.

WAYNE UNIVERSITY VETERAN COURSES

Many postgraduate courses are now in process at Wayne University, for the readjustment of veterans, and available to them only. These courses began December 31, 1945, and are continuing for ten weeks. The fee is nominal. Regional Dissection; Survey of Pharmacology; Principles of Therapeutics; Review of Physiological Chemistry; Ward Rounds and conferences (limited to four) on Hematology; Psychiatry (limited to 12); Basic Ophthalmology (limited to 12). There were short courses now finished (four weeks) Clinic and Conference on Dermatology; Ward Rounds and Conferences on Internal Medicine.

Many courses are available during the quarter beginning December 31, 1945. There are continuation courses designed for practitioners and veterans. They are approved for residency training by the Committee on Medical Education of the AMA. Anatomy; Advanced Dissection; Evolution of the Human Body; Advanced Histology; Endocrinology; Problems in Neurology. Pharmacology: Physical Medicine; Seminar in Pharmacology. Bacteriology: Clinical Pathology; Immunology and Virology. Physiological Chemistry: Nutrition; Carbohydrate Metabolism; Seminar in Physiological Chemistry. Pathology: Pathology of Tuberculosis; Neoplasms; Heart. Internal Medicine: Medical Pathological Conferences; Diagnostic Conferences; Electrocardiology; Therapeutic Conferences; Hematologic Conferences; Gastro-enterology; Medical X-ray Conferences; Neurological Conferences; Psychosomatic Clinic. Dermatology: Dermatopathology; Conference on Venereal Diseases; Seminar in Dermatology.

This postgraduate program includes work leading to a Master's Degree in all of the Medical Specialties. There is also a Basic Science work for hospitals maintaining residency programs, and a number of hospitals not associated with medical schools are enrolled. The faculty welcome ex-servicemen to help develop their refresher or postgraduate plans.

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or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

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Political Medicine

NATIONAL FOUNDATION TO COMBAT ARTHRITIS

We have received a news release from a New York office headed "President Truman Heads New National Foundation to Combat Arthritis." A national campaign is being inaugurated to raise $2,500,000 for the establishment of a research foundation with main buildings to be located at Hot Springs National Park. In the names of sponsors are only two doctors of medicine, Thomas Parran, Surgeon General of the U. S. Public Health Service, and Morris Fishbein.

This is a worthy cause, and should be encouraged, but the honorary sponsor and the *first* medical name on the list do not lend to the belief that the best of scientific attainments will always be the uppermost function. Both of these gentlemen are advocating in every manner and at every opportunity the socializing of medicine. One misquotes selective service figures to substantiate the plan of national compulsory health insurance to which he has allowed his name to be attached, and the other has attempted to compel his under officers to submit to a muzzle when discussing the subject of political or socialized medicine.

FACTS AND FANCIES REGARDING 30 PER CENT OF DRAFT REJECTIONS

President Truman, in his address to the 79th Congress, November 19, 1945, gave as his first reason for proposing compulsory health insurance the fact that the draft rejected 30 per cent of those examined on account of physical defects. He said:

"The people of the United States received a shock when the medical examinations conducted by the Selective Service System revealed the widespread physical and mental incapacity among the young people of our Nation. We had had prior warnings from eminent medical authorities and from investigating committees. The statistics of the last war had shown the same condition. But the Selective Service System has brought it forcibly to our attention recently in terms which all of us can understand.

"As of April 1, 1945, nearly 5,000,000 male registrants between the ages of 18 and 37 had been examined and classified as unfit for military service. The number of those rejected for military service was about 30 per cent of all those examined. The percentage of rejection was lower in the younger age groups and higher in the higher age groups, reaching as high as 49 per cent for registrants between the ages of thirty-four and thirty-seven.

"In addition, after actual induction, about a million and a half men had to be discharged from the Army and Navy for physical or mental disability, exclusive of wounds; and an equal number had to be treated in the armed forces for diseases or defects which existed before induction.

"Among the young women who applied for admission to the Women's Army Corps there was similar disability. Over one-third of those examined were rejected for physical or mental reasons.

"These men and women who were rejected for military service are not necessarily incapable of civilian work. It is plain, however, that they have illnesses and defects that handicap them, reduce their working capacity, or shorten their lives."

An analysis of the so-called 5,000,000 4-F's, or 30 per cent who were rejected, for military defects, was made by Lowell S. Goin, M.D., retiring president of the California Medical Association and printed in *California and Western Medicine,* May 1945:

"Since the five million 4F's are so frequently invoked, and since it is at first glance so shocking a figure, let us examine it in some detail. One difficulty with the argument is that intellectually it is not very honest. In Senator Pepper's interim report the figure is announced on page one not as five million, but as four-and-one-half million, but on page three of the same report the graph discloses the true figure to be 4,217,000. An error of 13.5 per cent can scarcely be considered as insignificant.

"Of the total number rejected 444,000 were rejected as manifestly disqualified, that is to say the totally blind, the totally deaf, the deaf-mutes, the legless, the armless and so forth. It seems perfectly obvious that no program of medical care could have influenced this figure.

"701,700 were rejected for mental disease. Again I don't know of a program of medical care which would have prevented mental disease in these unfortunate people.

"582,000 were rejected for mental deficiency, that is to say, that they were the imbeciles, the idiots and the morons. The most casual knowledge of eugenics would persuade anyone that this group does not constitute a medical problem, and these three groups together reach the large total of 1,727,600.

"When these have been excluded there remain 2,426,-500 or somewhat less than half of the originally claimed five-million.

"Of this group 320,000 were rejected for muscular-skeletal defects, that is to say the clubfoot, the paralytic, the withered arm, the congenitally dislocated hip and so forth. Again I wonder what program of medical care might have made this group fit for military service.

"280,000 were rejected for syphilis. The statute books are already loaded with laws regarding syphilis. There is probably not a community in the United States in which a person afflicted with this disease cannot secure treatment from the Department of Public Health. How, then, would compulsory health insurance have eliminated this group?

"220,000 were rejected for hernia. Hernia is a congenital defect and if a person is born with a defective inguinal or femoral canal he is likely to have a hernia and medical care has nothing whatever to do with the occurrence of hernia.

"160,000 were rejected for 'eyes.' Since eyes would seem to be useful adjuncts to men who were to be soldiers or sailors I presume that this means defective vision. If one is born with an eyeball too long or too short or one which is not a globe one will either wear glasses or not see very well and medical care has nothing whatever to do with it.

"Thus about one million more have been eliminated and the number of rejections on a basis of lack of medical care is about 1,500,000. Whether any program of

(Continued on Page 306)

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War Medicine

ARMY NEUROPATHOLOGIST'S REPORT ON EXAMINATION OF DR. ROBERT LEY'S BRAIN

The brain of Dr. Robert Ley, Nazi leader, which was shipped by air to the United States in November of last year for gross examination and microscopic study by Army pathologists shows "a long-standing degenerative process of the frontal lobes."

Degeneration in the brain of Dr. Ley, who hanged himself to avoid trial as a war criminal, was sufficient to account for the unusual behavior of the former German labor leader.

Reports on the results of the neuropathological study of the brain, which was made at the Army Institute of Pathology under the direction of Colonel J. E. Ash, stated that photographs of the brain show considerable thickening of the brain covering over the frontal lobes of both sides. The underlying convolutions as well as some of the blood vessels are hidden from view by this thickening. However, the rest of the brain has a normal appearance, in that it is delicate and transparent.

Slight atrophy is indicated by the prominent condition of the grooves between the convolutions of the frontal lobes, and examination of the frontal lobes under the microscope disclosed a long-standing degenerative process, which in medical parlance is referred to as a "chronic encephalopathy."

This disease process cannot be ascribed to the airplane accident Dr. Ley suffered in 1917, because the damage is so symmetrical, according to Army pathologists. They also added that there is no evidence of pre-existing meninigitis.

Dr. Ley's type of degeneration, the report pointed out, is sometimes seen in those addicted to alcohol, but proof that alcohol is in itself a causative factor is completely lacking. The degeneration is of sufficient duration and degree to have impaired Dr. Ley's mental and emotional faculties and could well account for his alleged aberrations in conducts and feelings, since normally the frontal lobes are requisite for complex types of thinking and for a proper development of the "social sense" and since they exercise a restraint on emotional impulses, the report explained.

CIVILIAN INSTITUTIONS WILL PROFIT FROM ARMY PSYCHIATRIC EXPERIENCES

By applying the psychiatric lessons learned in recent years, the industrial, educational and criminal institutions of the country and society in general can derive tremendous benefits, according to Brigadier General William C. Menninger.

In order to capitalize on these advances, there must be a wider dissemination of this knowledge among the practicing physicians in this country and more workers must be attracted to the field of psychiatry. Major changes must also be made in medical education if full results are to be attained, General Menninger added.

The marked strides made in neuropsychiatry, which represent one of the major achievements of the Medical Department, were made possible through the skill and knowledge of many of the nation's outstanding psychiatrists, who were marshaled together by the Surgeon General's Office to collaborate in the treatment and prevention of neuropsychiatric cases at a time when there were more cases of this type than medical science had ever dealt with before.

The size of the problem is indicated in the fact that 314,500 men had been discharged by July 1, 1945, for neuropsychiatric causes. This figure represents 43 per cent of the soldiers discharged for medical reasons. In addition, there were 130,000 more men discharged because of personality defects which made them unsuitable for the Army. The picture becomes even darker, considering that out of 4,650,000 men rejected for all causes, 1,825,000, or 39 per cent were rejected for some type of personality disorder.

General Menninger said that a majority of these discharged soldiers will be able to make a normal adjustment in civilian life. Surveys have shown that most of them are able to adapt themselves to their respective communities and are able to hold down jobs again Satisfaction in work and play, security and understanding on the part of family and friends provide the best medicine for these veterans.

Through its wide experience with neuropsychiatric cases in this war, the Army developed methods of treatment which proved effective in caring for the soldiers suffering from mental and nervous disorders.

The stress of combat produced a large number of what the Army calls "combat exhaustion cases." From 30 to 40 per cent of these soldiers were salvaged by psychiatric treatment in the first two days close to the front lines, while an additional 20 per cent were made fit for duty in from five to eight days at an improvised unit called the exhaustion center.

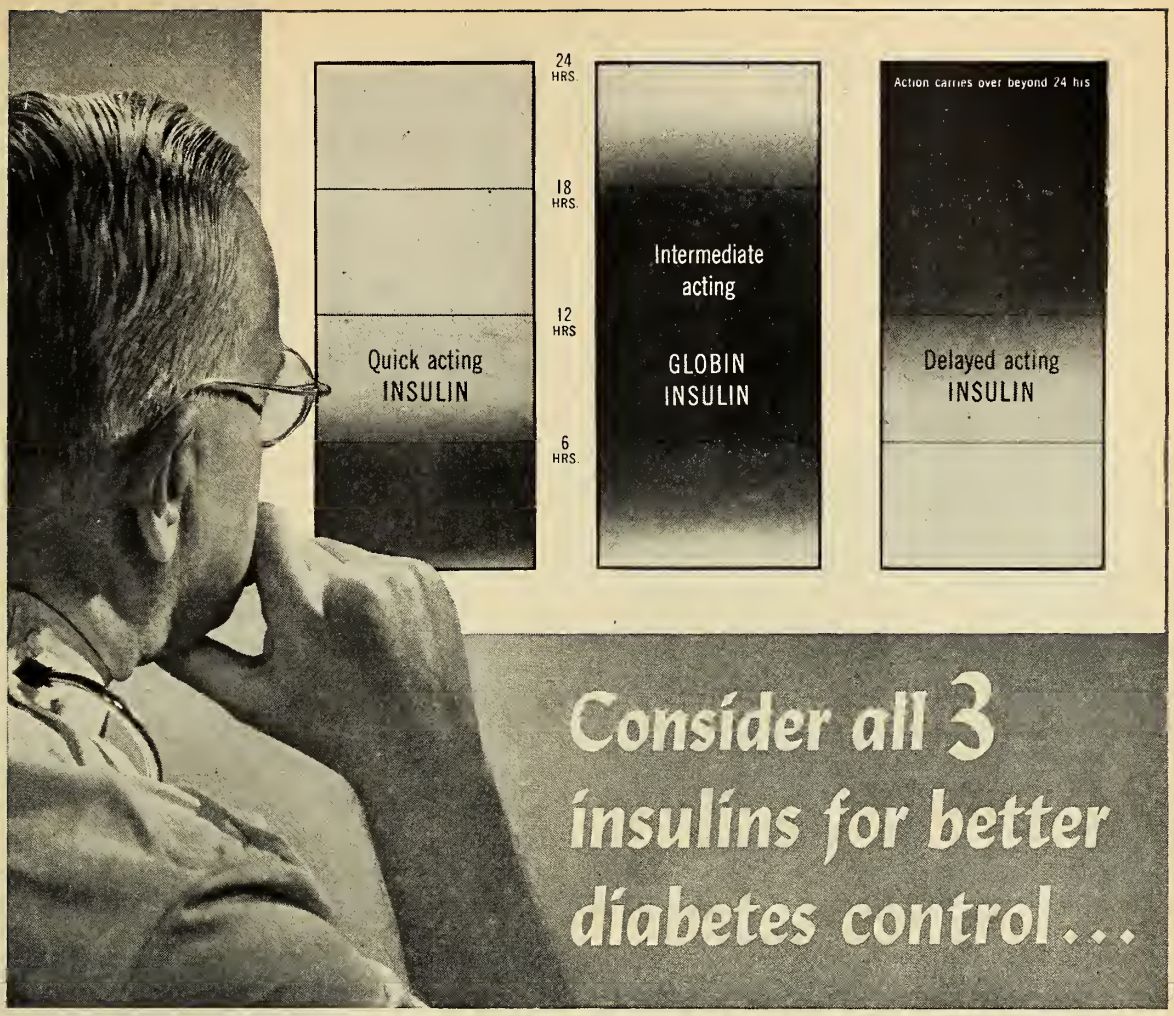
POLITICAL MEDICINE

(Continued from Page 304)

medical care would have materially reduced this number is problematical.

"If the proponents wish to rest their case upon the need shown here (and they have made a great deal of it), I am content."

We might be impressed by some of the arguments from those who are trying to socialize medicine, if those arguments were honest, but if they are so distorted as these facts we wonder whether their basic thinking is not fully as distorted.



THE physician now has three types of insulin available to treat diabetes. One is quick-acting but short-lived. Another is slow-acting but long-lived. The new third one—'Wellcome' Globin Insulin with Zinc—is intermediate.

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The Doctor's Hobby

MODERN WORKSHOPS

By KELCY KERN

The architectural profession recently announced that over half of all new postwar homes would either be equipped with modern workshops or provisions would be made in the plans for their installations at a later date. There are several reasons for this trend of millions of

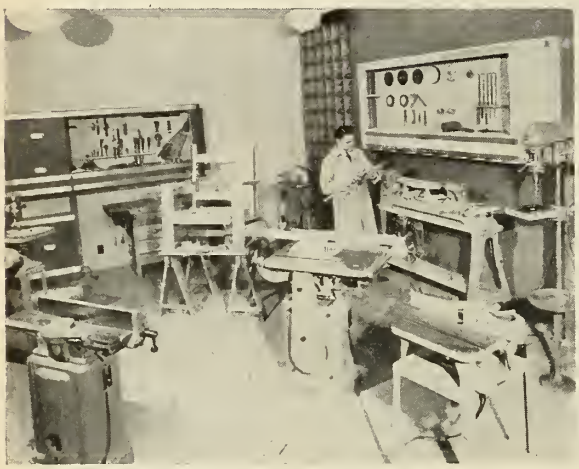


Fig. 1. A modern workshop.

our people of both sexes, old and young, toward the use of tools and machinery in the home. One is, that millions learned to use tools and machinery in wartime trade schools, secondary schools, war plants and in the armed forces, and a large percentage of them will now continue working in wood, plastics and metals as a hobby.

In this hobby many in the medical profession are finding an ideal pastime and one which, at the same time, can be made really productive. The internist today working under constant pressure and tension needs a form of relaxation which will interest and amuse and, at the same time, provide an outlet for nerves kept on edge by long hours of arduous work and responsibility. Stated Dr. A. Stanley Kaye, 751 Gerard Avenue, Bronx, N. Y., whose home workshop has attracted widespread comment in the press:

"Having a home workshop is marvelous for the development of personal morale, for the occupation it provides for the mind, and for the emotional stability it brings to it.

"Every medical man—every one—should have a hobby, so that he will have within himself some degree of self-sufficiency, some escape from boredom. The home workshop is ideal for the medical person because he or she is always on call and he can easily drop a workshop project he may have in hand and return to it later without losing anything. Just 'leave things as they are.' Not so easy with *some* hobbies."

This paper is published to indicate relaxation for the busy man. If any of our members wish to contribute in like manner, we shall use the material in so far as our space allows.—EDITOR.

The internist who is attracted by working with tools or machinery can today take advantage of vastly improved tools and machinery—developments of wartime. Power-driven light machinery is safer, faster, easier to use and more versatile than ever before. Hand tools are improved. Work can be done either in wood or plastics, and articles of a hundred types can be made for pleasure or profit. It is not necessary for the doctor to completely outfit his home workshop at the beginning. ("How to Plan a Home Work Shop"—Delta Craft Books, Milwaukee, Wisconsin.)

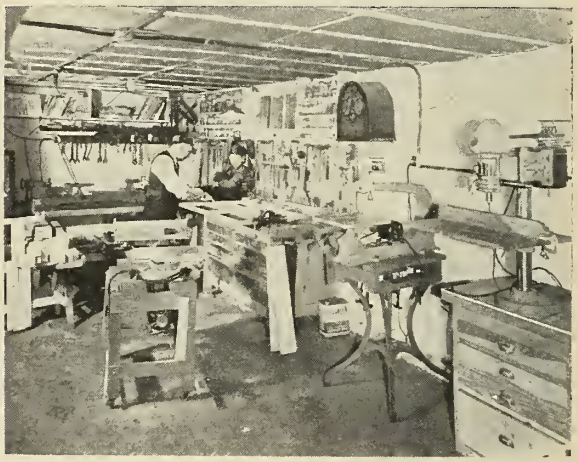


Fig. 2. The shop can be as large as the ambitions of the owner may require.

A brief discussion of the modern home workshop and its installation might be of value to doctors who are anxious to adopt this hobby.

The best location for the shop is in an outbuilding, possibly one end of the garage. Next, the basement of the home will do. The floor should be of concrete or cement covered with rubber matting, wood or linoleum. As a rule two branch circuits wired independenly of each other will provide power, rated at 15 amperes.

Modern light wood- and pastics-working machinery may be introduced to the shop in the following order of importance and usefulness: circular saw, drill press, grinder, lathe, scroll saw, shaper, disk or belt sander, and band saw.

As for initial hand tool requirements: hand drill, hack saw, nail set, oil stone, combination pliers, level, set pocket chisels, combination square, nail hammer, C clamps, cut-off saw, jack plane, screwdrivers, rip saw, folding rule, ratchet brace, and set auger bits.

Of first importance is a good spray booth and spray-

(Continued on Page 310)

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(Continued from Page 308)

ing gun for paint, varnish or lacquer. Sprayed paint dries faster, comes out smoother with a more professional looking finish.

Daylight for the home workshop is always to be preferred. If not available or limited, step up with proper artificial lighting.



Fig. 3. The shop may be combined with the playroom.

To subdue working noise, the walls and ceilings may be partially treated with acoustical material though most machinery comes on rubber "feet" to deaden sound of operation. Tool cabinets can be hung on the wall to save space and there are plenty of good plans for this which any beginner can follow.

The intern who adopts this hobby will, of course, consider it primarily as a form of relaxation yet one which is productive of many useful articles which may be used, given away, or sold. Also, such a home workshop permits the owner to handle most of the care and repair work around the house and grounds. Here are some of the articles being made by amateurs for use and sale: boats, humidors, boxes, shelving, bird houses, bowls, furniture, dog houses, door knockers, pipe racks, costume jewelry, chests, candy boxes, umbrella racks, ball bats, ash trays, and book ends.

It is often the case that the person introducing this hobby into his home can make the equipment pay for itself. This is done in one of three ways, first, by producing articles to be sold through local stores or direct to neighbors, friends or acquaintances, second, through rentals of tools and equipment along with the shop to neighbors or others, third, by the sale of the products of the hobby to and through bazaars and at other events.

Today, there are thousands of blueprints and plans for making articles of wood, plastics and metals. They are so simple that any one at all handy with tools can follow them with skill and excellent results. The home workshop supplies the owner not only with a physical relaxation but also with a mental and emotional experience. He can, after a hard day or night, "take it out" on a piece of wood and enjoy the thrill of creating something of beauty or usefulness or both.

Yet, a modern wood-working machine is not confined to simple objects for the home. It is possible to do light construction jobs around the home, cutting, shaping and finishing the wood in the shop and assembling and constructing on the spot—a chicken house, for instance.

Where a doctor has a son or daughter in secondary school and taking school shop, the home workshop offers a good opportunity to practice at home those projects that are being studied and worked out in the school.

AMA OFFERS VOLUNTARY MEDICAL CARE PLAN FOR UNITED STATES

(Continued from Page 284)

Klamath Medical Service
Klamath Falls, Oregon

Coos Bay Hospital Association
Marshfield, Oregon

Physicians Association
Oregon City, Oregon

Oregon Physicians' Service
Salem, Oregon

Medical Service Association of Pennsylvania
Harrisburg, Pennsylvania

Group Medical and Surgical Service
Dallas, Texas

Virginia Medical Service Association
Richmond, Virginia

Surgical Care, Inc.
Roanoke, Virginia

Washington Medical Bureau
(17 Plans Included)
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Medical Service, Inc.
Charleston, West Virginia

Marion County Medical Service, Inc.
Fairmont, West Virginia

Huntington Hospital Service
Huntington, West Virginia

Central West Virginia Medical Service, Inc.
Weston, West Virginia

Hospital Association of Kentucky and West Virginia, Inc.
Williamson, West Virginia

Wisconsin State Association Plan
Madison, Wisconsin

Surgical Care
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Editorial Comment

COMPULSORY HEALTH INSURANCE

According to Arthur Sears Henning, "The compulsory health insurance plan is chiefly the brain child of Isadore S. Falk, research director of the Social Security Board, and Michael M. Davis, a member of the CIO Political Action Committee." Neither the President nor Mr. Wagner nor the Social Security Board made any attempt to consult representatives of the American Medical Association in regard to the bill. In spite of protestations by the President and Mr. Wagner that the bill does not constitute socialization of the practice of medicine, it would do just that, and is the effort on the part of a socialistically minded minority to force socialism on our country contrary to our Constitution, which guarantees private industry. The placing of American medicine under bureaucratic control in Washington is just the first step in the regimentation of industry, finance and, eventually, labor itself.—Editorial, *Minnesota Medicine,* December, 1945.

WHAT ARE YOU DOING ABOUT STATE MEDICINE?

Too many doctors of medicine are becoming indifferent and immune to the Wagner-Murray-Dingell Bill. Too many do not realize that their mode of professional life stops with the enactment of this measure. Too many have themselves been duped by the propaganda of the sponsors of this scheme. Not many realize that this measure will create absolute state medicine for the participants, and that they will become employes of the Government and responsible to the same for their every act. Too many are financially independent and are indifferent accordingly, thus betraying the past and future achievements of the medical science that gave them their knowledge and dignity, and that nurtured them.—Editorial, *Journal of the Maine Medical Association,* January, 1946.

HEALTH INSURANCE INQUIRIES PENDING IN NUMEROUS STATES

"Fourteen compulsory health insurance measures were introduced in the legislatures of six states, and seventeen cash sickness benefit measures were proposed to the legislatures of nine other states," Mr. E. H. O'Conner, Managing Director of Insurance Economics Society of America, told the Industrial Insurers' Conference at its annual meeting in Nashville, Tennessee. "Atlhough none of these measures were adopted in a number of states, legislative study committees have been set up, and the existance of these committees, in addition to known activities in certain other states, gives us every reason to believe that we may expect great activity in the social insurance field as state legislatures come into session during the next two years. Right at this moment, the picture before us is one which seems to call for more attention to the problems of the states than to developments immediately probable in in the federal field.

"Briefly, legislative studies of health insurance or closely related matters have been authorized in the states of California, Washington, Illinois, New York, Virginia, and West Virginia. Strong pressure is believed to be accumulating in the states of Michigan and New Jersey, possibly others."—*Christian Science Monitor,* Dec. 7, 1945.

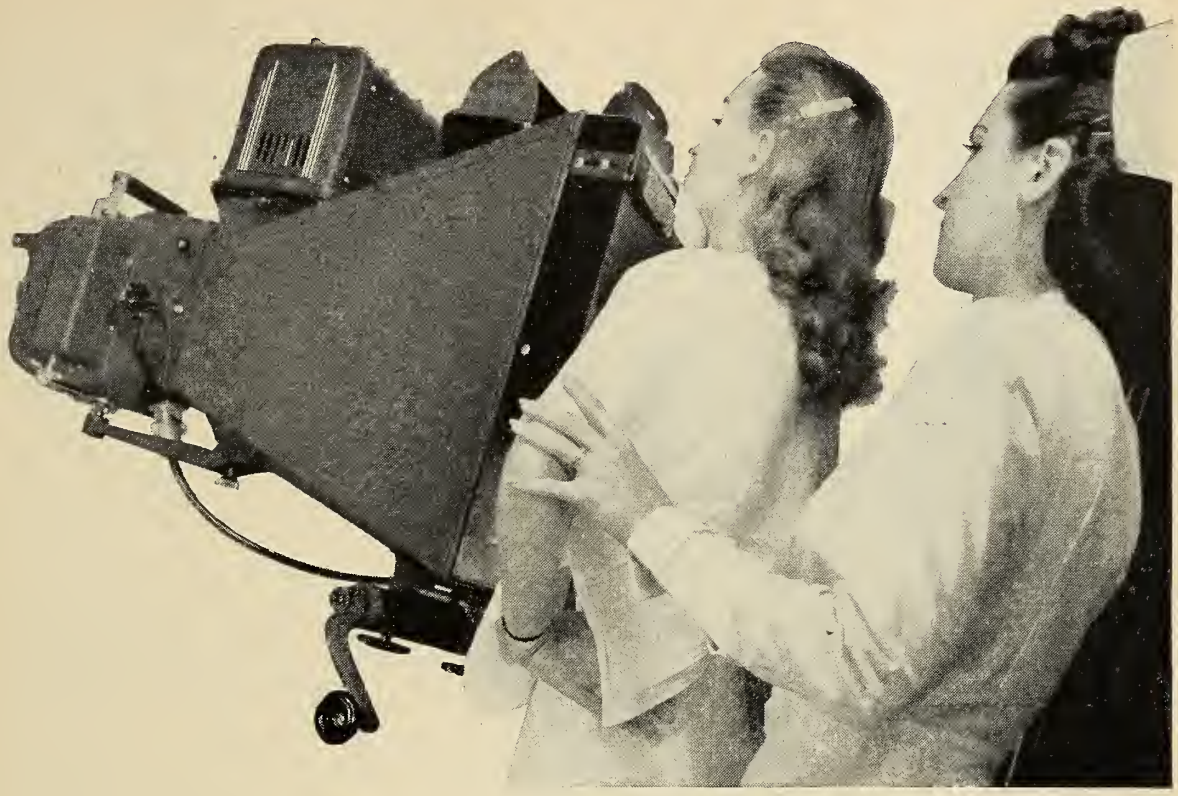
IMPROVEMENT IN MEDICAL CARE

"Those who are agitating for an elaborate Federally controlled national health program, such as that proposed by President Truman in his message to Congress, lay great stress on the shortcomings of the existing system. They thereby create the impression that individual states and communities have 'failed' to solve the nation's health problem, and that therefore it is time for the Federal Government to take over the job.

"In making that assumption they ignore an impressive movement looking toward improved health care that is now showing intense activity throughout the country. It is a movement not inspired from above but initiated by the communities. It is not revolutionary, but a continuation of a health program that has been going on for years. It is what used to be called typically American, in that it is an effort on the part of the people to help themselves instead of waiting for somebody else to help them."—Editorial, *Baltimore Sun,* January 8, 1946.

(Continued on Page 314)

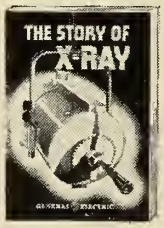
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Through well-directed educational campaigns sponsored by tuberculosis organizations throughout the nation, men, women, and children have been learning about technological developments which today make it economically feasible to conduct x-ray chest exminations of large groups of people for the purpose of detecting unsuspected tubercular infections in apparently healthy individuals.

Public interest having been so thoroughly aroused, many communities have adopted individually planned x-ray chest survey programs as a most effective measure for tuberculosis control—for screening out and isolating individuals who, "ignorant of the fact that they have the disease, unknowingly jeopardize their own lives and the lives of those with whom they come in contact."

Come the time when such a survey is suggested for your community, and your professional advice probably sought by the local tuberculosis society, we shall be glad to help you prepare a summary which would evaluate the various methods and facilities used for different types of chest surveys. These evaluations, may we assure you, will be unprejudiced, as G-E photo-roentgen apparatus is not limited to but one model, nor restricted to the use of one size of film. Address General Electric X-Ray Corporation, 175 W. Jackson Blvd., Chicago 4, Illinois.



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The State's Oldest Physician



HOMER PEASE MIX, M.D., Riverside, ninety-four years of age, is Michigan's oldest physician. Born in Orion, Richland County, Wisconsin, October 10, 1851, the physician spent his early years on a Wisconsin farm. After undergraduate study, he taught in rural schools. In 1880, Dr. Mix was graduated from Hahnemann Medical College and Hospital, Chicago. He served an internship at Cook County Hospital and was licensed to practice in Illinois but shortly thereafter took over the practice of a deceased physician in Highland, Iowa County, Wisconsin. Here the occupational accidents that arise in the activities of a lead and zinc mining town introduced him to a type of industrial practice and he was appointed county physician.

In 1883 he was married to Agnes Jenkin of Mineral Point, Wisconsin, daughter of a pioneer hardware and farm implement merchant. In 1908, Dr. Mix moved his family to Benton Harbor and in 1912 to Riverside where the physician remained in active practice until 1945.

The *St. Joseph Herald,* October 12, 1931, stated that forty years of Dr. Mix's career had been spent as a health officer, both in Wisconsin and Michigan.

Throughout his years of practice, Dr. Mix has maintained a direct personal interest in various collections, one in particular being of Indian relics and including hundreds of specimens. One item is a set of candle snuffers once owned by George Washington.

In reviewing his assistance at births, Dr. Mix said his customary fee in the very old days was $10.00. This, he said, he received sometimes in cash, but more often in small potatoes or crooked cord wood.

In 1922 Mrs. Mix died at their home in Riverside, leaving four children, eight grandchildren and two great grandchildren.

The photograph of Michigan's oldest physician was taken on his ninety-third birthday. Our congratulations to Dr. Mix and our felicitations on the good work he has accomplished for his patients, his community and his profession during the sixty-six years of his medical ministrations.

EDITORIAL COMMENT

(Continued from Page 312)

WHO WILL WIN AND WHO WILL LOSE?

Who Will Win?

Who will win if national compulsory sickness insurance is inaugurated in this country?

1. A few physicians who are willing to practice mass medicine, who are willing to abandon the ideals of medicine and render an indifferent, impersonal type of low standard service to the public.

2. A large group of politically minded job hunters who would receive pork barrel appointments as administrators of a vast governmental bureau.

3. Certain politicians, until the time of reaction arrived as a result of the demonstrated defects of compulsory sickness insurance.

Who Will Lose?

1. The taxpayer who will be burdened with a tax for which he receives little in return.

2. The non-taxpayer, the poor, who now receive the best of medical care from our best physicians in accordance with the ideals and traditions of the profession, and who are not provided for under the compulsory program.

3. The public, the gullible public, who accept without question the promises and arguments of politically ambitious persons in favor of national socialism.

4. Industry, which will be taxed a portion of its profits to support a program resulting in more work days lost. This portion of its profits might better be devoted to the salaries of employes to give them more real security.

5. Our community hospitals, which will be forced to abide by governmental regulations and to adjust their standards of service to the lower per diem payment allowed under the Scheme.

6. Our Blue Cross Plans which have demonstrated that the cost of hospitalization can be met for the majority of our people on a voluntary, democratic basis.

7. Our children and our children's children because of lowered health and health standards and through relieving them of the sense that they must be responsible for their own welfare.

8. Our labor unions who disregard the warning of their great leader, Samuel Gompers, when he said in 1916, "For a mess of pottage, under the pretense of compulsory social insurance, let us not voluntarily surrender the fundamental principles of libery and freedom, the hope of the Republic of the United States, the leader and teacher to the world of the significance of this great anthem chorus of humanity—liberty!"—Editorial, *Journal, Medical Society of New Jersey,* January, 1946.



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Contributions and Pledges to Michigan Foundation for Medical and Health Education

From September 18, 1945, To February 15, 1946

Allegan County Medical Society	$ 85	Jackson County Medical Society	350
Anonymous, in Memory of his Mother	$ 1,000	Joint Committee on Health Education	1,000
Regis V. Asselin, M.D., Detroit	5	Francis Jones, M.D., Lansing	1,000
Barry County Medical Society	50	Lenawee County Medical Society	125
M. G. Becker, M.D., Edmore	1,000	Mason County Medical Society	35
A. P. Biddle Estate	2,933.81	Mecosta-Osceola-Lake Co. Med. Soc	45
Branch County Medical Society	85	H. A. Meinke, M.D., Hazel Park	50
C. D. Brooks, M.D., Detroit	1,000	Menominee County Medical Society	55
J. D. Bruce, M.D., Ann Arbor	1,000	Michigan Medical Service	10,000
A. S. Brunk, M.D. Detroit	1,000	Mrs. K. B. Miner, Flint (in memory of F. B. Miner, M.D.)	1,000
E. I. Carr, M.D., Lansing	1,000	H. L. Morris, M.D., Detroit	1,000
L. G. Christian, M.D., Lansing	100	Muskegon County Medical Society	310
C. V. Costello, M.D., Holland	1,000	Cora B. Neal, Grand Rapids	1,000
H. H. Cummings, M.D., Ann Arbor	1,000	Ontonagon County Medical Society	15
A. C. Curtis, M.D., Ann Arbor	15	Lawrence Reynolds, M.D., Detroit	1,000
J. S. DeTar, M.D., Milan	1,000	J. M. Robb, M.D., Detroit	1,000
Dickinson-Iron County Medical Society	80	St. Clair County Medical Society	220
Eaton County Medical Society	70	G. B. Saltonstall, M.D., Charlevoix	1,000
A. C. Furstenberg, M.D., Ann Arbor	1,000	E. F. Sladek, M.D., Traverse City	5,000
L. J. Gariepy, M.D., Detroit	1,000	Ferris N. Smith, M.D., Grand Rapids	1,000
Genesee County Medical Society	1,000	H. B. Steinbach, M.D., Detroit	100
Robert W. Gillman, M.D., Detroit	1,000	R. H. Stevens, M.D., Detroit	1,000
Grand Traverse-Leelanau-Benzie Co. Med. Soc	167.50	C. L. Straith, M.D., Detroit	1,000
Hillsdale County Medical Society	95	R. H. Strange, M.D., Mt. Pleasant	1,000
L. J. Hirschman, M.D., Detroit	1,000	Ralph Wadley, M.D., Lansing	1,000
L. E. Holly, M.D., Muskegon	1,000	R. V. Walker, M.D., Detroit	1,000
Houghton-Baraga-Keewenaw Medical Society	140	H. L. Weitz, M.D., Traverse City	100
R. J. Hubbell, M.D., Kalamazoo	1,000	C. G. Wencke, M.D., Battle Creek	10
Huron County Medical Society	55	John O. Wetzel, M.D., Lansing	1,000
Wm. A. Hyland, M.D., Grand Rapids	1,000	E. R. Witwer, M.D., Detroit	1,000
Ingham County Medical Society	572.50	Margaret H. Zalen, M.D., Kalamazoo	5
S. W. Insley, M.D., Detroit	1,000		

(See page 302 for pledge card)

BALANCE SHEET

as of January 15, 1946

ASSETS			
1. Amount to be transferred from "MSMS Foundation for Postgraduate Medical Education."			
(a) Deliverable Bonds, (market value as per Michigan National Bank report)	$ 7,162.78	(cost was $7,044.03 —E and E rep.)	
(b) Cash	1,856.83		
(c) Series G Bonds (to be held in trust until maturity)	14,500.00		
			$ 23,519.61
2. Contributions to Michigan Foundation for Medical and Health Education (since Sept. 18, 1945)	32,451.31		
Less Legal and Misc. expenses, December, 1945	296.58		
			32,154.73
3. Estimate of value of Estate of Grace Biddle payable—contingent to a life interest—to Michigan Foundation for Medical and Health Education (per last annual inventory, dated May 2, 1945)			28,953.46
4. Pledges			15,675.00
TOTAL			$100,302.80
LIABILITIES			No Liabilities

The JOURNAL

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Anal Cryptitis

Its Relation to Focal Infection, Fissure and Fistula

By Wayne W. Flora, M.D.
Chicago, Illinois

Infection of anal crypts and their ducts often produces symptoms and disease processes greatly out of proportion to their apparent importance. Only when we study these structures and perhaps work backward from the pathologic process with which we are dealing as a disease problem to the origin of that disease do we understand their real significance.

Cryptitis is a subject that has been written and talked about for many years either as an entity or in relation to general or local disease. Since the reports of Tucker and Hellwig and Pope before the American Proctologic Society in 1933, emphasizing the importance of anal ducts associated with anal crypts, a number of other authors have studied and written about them. Now we realize how incomplete was our understanding of cryptitis previously. The presence of blind, simple, and branched ducts extending from the crypts into the subepithelial tissues of the anal canal and rectum and some even into their muscular portion furnishes an explanation for the extension of infection into these tissues. The more delicate nature of the secretory type of cells lining these ducts in contrast to the epithelial cell lining of the anal crypts makes the vulnerability of the former to trauma and infection more readily understandable.

Cryptitis may be acute or chronic. Seldom do we see or recognize an acute cryptitis. The acute stage may be recognized as the cause of various types of pain and perhaps spasm of the sphincter. It may be accompanied by tenderness to palpation or instrumental examination, redness of the crypt orifice, edema or bleeding. Chronic cryptitis is most often manifested by increased depth (over 5 or 6 mm.) and hypertrophied anal papilla. There may be a discharge visible in the crypt or granulation tissue within the crypt which may bleed.

Anatomy

The dividing line between the rectum, which is lined by mucous membrane, and the anal canal, which is lined by modified skin, is known by various terms which we use synonymously, namely, pectinate line, dentate line, anorectal line and mucocutaneous line. This line (Fig. 1) is irregular and in some individuals poorly defined. The crypts (Fig. 2) are cone shaped pockets which have their openings at this line pointing upward or internally in the direction of the rectum and their closed portion or apex pointing toward the exterior. The lateral wall of the crypt is the wall of the anal canal and the medial wall is formed by the anal valve (semilunar valve). The anal ducts open into the crypts on the lateral wall. The anal papillae are situated between the anal valves or sometimes on the valve itself. Crypts and papillae vary in number from about three to twelve, usually three to six. In general these structures are more numerous and prominent in infancy and childhood and they tend to disappear in adults.

The external sphincter (Fig. 1) is larger than usually realized. It is divided into three portions,

the subcutaneous, superficial and deep portions, only the first of which is encountered in most anorectal operations. This portion is one of the two important landmarks in anorectal surgery.

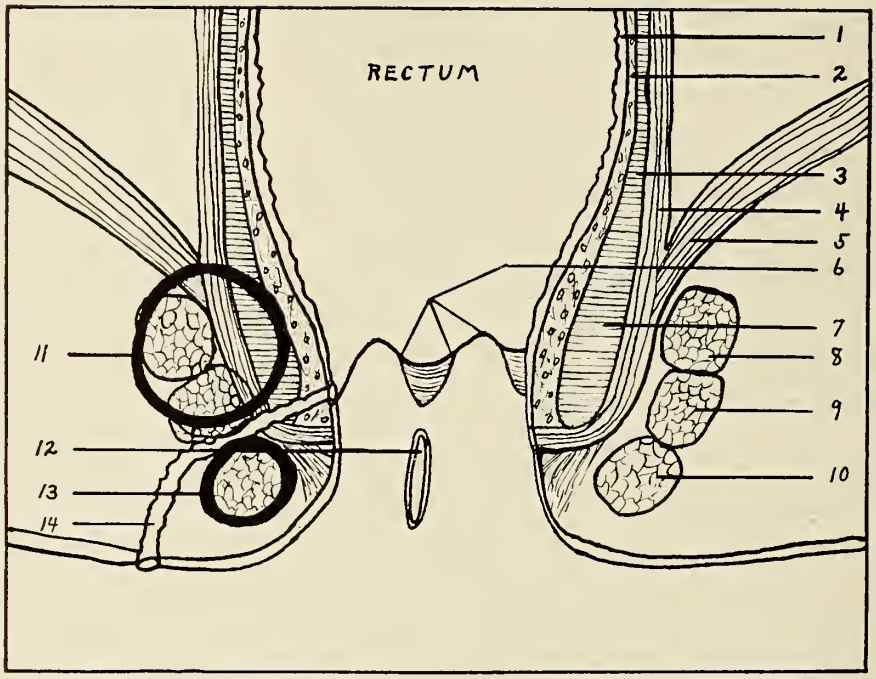


Fig. 1.—Diagram of anal canal (frontal section). (1) Mucosa; (2) submucosa; (3) Circular muscle coat; (4) longitudinal muscle coat; (5) levator ani; (6) anorectal line; (7) internal sphincter; (8) deep external sphincter; (9) superficial external sphincter; (10) subcutaneous external sphincter; (11) anorectal ring; (12) anal fissure; (13) same as 10; (14) anal fistula.

The other is the "anorectal ring" which consists of a group of muscles—the other two portions of the external sphincter, the internal sphincter, the levator ani and the longitudinal muscle layer of the rectal wall. Lateral to these muscular structures are the ischiorectal fossae which are involved in so many cases of fistula.

Focal Infection

The amount of emphasis placed on focal infection varies widely with individuals. Infection in the anorectal region can be a cause of disease elsewhere in the body the same as disease in the teeth, tonsils, sinuses, gall bladder, prostate or any other source. Complaints are registered varying from definite muscle or joint pains to vague complaints such as indigestion, sleeplessness and tiredness. Patients with these kind of symptoms which might be attributed to focal infection should have a thorough examination during which the anorectal region should not be neglected. If diseased crypts are found they should be eradicated. This attitude will not lead to indiscriminate removal of crypts but it will keep attention directed toward them as a possible focus of infection.

Anal Fissure (Ulcer)

Anal fissure or ulcer occurs in the anal canal especially at the posterior midline and less frequently at the anterior midline. The two main predisposing causes are the presence of weak spots in the muscular supports of the anal canal and cryptitis. The posterior midline where a number of sphincter fibers, instead of remaining circular, take a course nearly parallel to each other and insert into the anococcygeal ligament is the weakest portion of the anal canal. Of lesser degree is the defect in the anterior midline where a number of sphincter fibers decussate instead of remaining circular. Infection of a crypt leads to thrombosis of the small vessels in the tissues of the anal canal associated with that crypt making those tissues more susceptible to trauma. Trauma, such as a large or hard stool, foreign bodies in the stool, e. g., small seeds, egg shell, pieces of bone, tooth brush bristles, et cetera, or even frequent thin stools and infection are the active

causes of anal fissure. Sometimes we see a fissure surrounded by or closely associated with varices. These were probably a predisposing factor in causation by reducing tissue resistance and

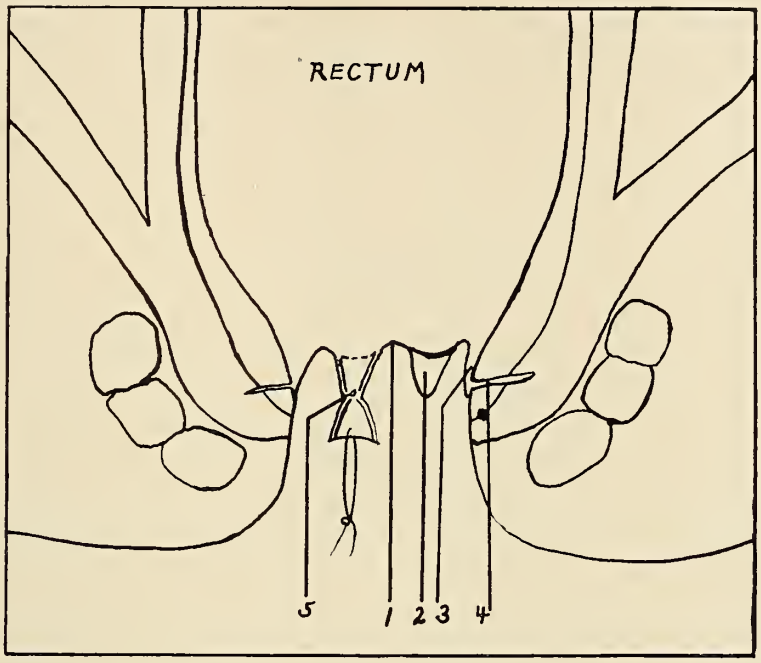


Fig. 2.—Diagram of anal canal (frontal section), showing anal valve cut and turned down to expose lateral crypt wall and duct orifice. (1) Anal papilla; (2) anal (semilunar) valve; (3) anal crypt; (4) anal duct; (5) duct orifice.

making the tissues more liable to trauma. Likewise they will act as a hindrance to healing. This situation is somewhat related to that of varicose ulcer of the leg. Trauma, infection and poor nutrition of the local tissues on a basis of deficient circulation are common to both conditions.

For a discussion of treatment, anal fissure is conveniently divided into three groups. The first may not actually be a fissure but it is so closely related that it is well to consider it as such. It is a very superficial linear crack in the skin for which treatment is not commonly sought because of its simplicity. It will heal with no attention or with the simplest treatment. Controlling the consistency of the stools to keep them soft formed by diet, mineral oil or a bulk producing preparation or some combination of these and use of an anesthetic ointment locally is usually sufficient.

The second group is made up of fissures which actually require treatment for relief of pain. The fissure is moderately deep and painful. The borders may be slightly undermined and there will probably be considerable sphincter spasm. Many of this group may be satisfactorily treated by injection. In general, injection treatments follow one of two principles: anesthesia and rest directed to the fissure specifically and anesthesia and rest applied to the anal region generally. The first one, the one which I prefer, is based on the properties of quinine and urea hydrochloride of producing a long lasting anesthesia and a tissue irritation which causes the tissues to become rigid and resistant to motion. This acts as a splint to the fissure. By injecting this solution underneath the fissure and the immediately surrounding tissues and a small amount into the sphincter, pain, spasm and motion will be reduced so the patient will be comfortable and healing will take place. The second injection principle is quite similar but its action depends more on the relaxation of the sphincter by the injection, into and about it, of an anesthetic in oil. Again healing is favored by reducing sphincter spasm and motion in the diseased tissues and pain is reduced due to relaxation of the sphincter. Probably personal experience with a painful lesion of the anal region is necessary for one to really appreciate the amount of activity which takes place in these tissues and the frequent and variable changes which occur in sphincter tone with various body activities. The

therapeutic value of rest in anal fissure is manifested by comfort of the patient and healing of the lesion. The vicious circle (pain and spasm) so uniformly present in cases of fissure is broken by injection treatment.

Anal Fistula

Anal fistula of the common variety only will be dealt with here. This consists of an internal opening at the pectinate line and a channel leading from it to an external opening on the perianal skin. The initial lesion and first stage is infection of a crypt and its duct. The second stage in the process of development is a burrowing of the infection through the wall of the anal canal. The third stage is the spread of the infection into the perianal and ischiorectal tissue with abscess formation. The fourth stage consists of the completion of the fistulous tract by rupture of the abscess onto the skin surface or the incision of the abscess by the surgeon. It is thus seen that fistulae arise internally and result from abscess formation.

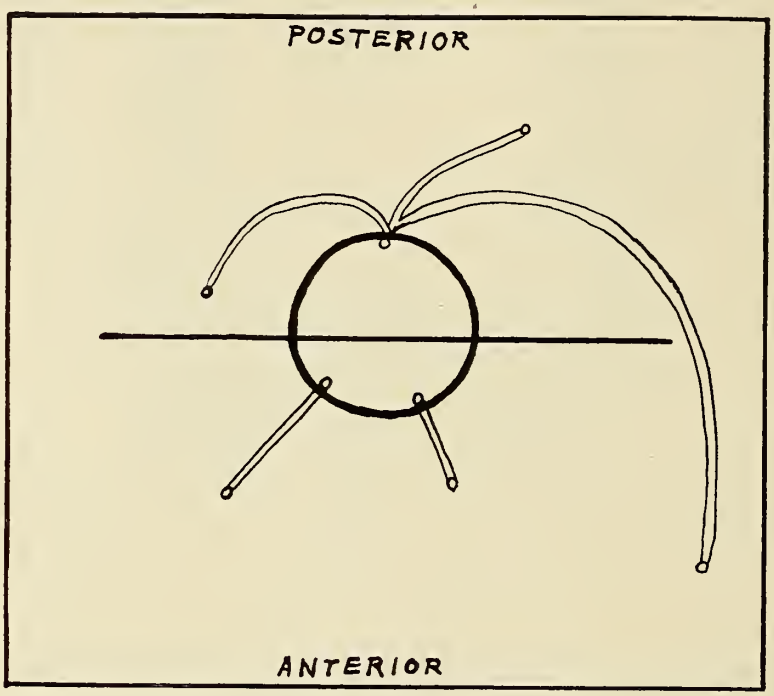


Fig. 3.—Diagram to illustrate Salmon's law.

The third group of anal fissures consists of those which are chronic or recurrent and usually associated with one or more of the following conditions: diseased crypt, hypertrophied anal papilla, sentinel pile, excessive scar tissue or anal contraction. Fissures associated with other surgical diseases of the anorectal region should be treated surgically. Quite often sphincter fibres can be seen in the base of these ulcers. Incision or divulsion for such a lesion is not the best treatment because it does not eradicate the pathological process. Proper treatment consists of excision of the fissure including its fibrous edges and base, its associated crypt, papilla and "sentinel pile," if present, and extension of the external incision onto the skin surface in such a manner that the internal portion will heal first. Careful dilatation of the anal canal should be done to overcome sphincter spasm and when there is a fibrous constriction or a hypertrophied sphincter incision in the posterior midline is advisable.

As in the case of acute cryptitis previously mentioned, seldom does the patient present himself for examination before the third or even the fourth stage. However, many will seek help early in the third stage and it is in these cases that the doctor can do most to relieve suffering. Contrary to the method of treatment of many other lesions requiring incision and drainage, perianal or ischiorectal abscess should be looked for and treated surgically as soon as the lesion can be located even though

an inch or more of normal tissue may be incised in order to reach a deep abscess. Procrastination or delay only increases the suffering of the patient and leads to further destruction of tissue. Don't wait for this type of abscess to "point." Incise it early and freely, preferably with a crucial incision. Drainage material is best restricted to soft rubber tissue and this for not more than 24 hours. Treatment of the abscess may be considered the first phase of treatment of a fistula and fistulectomy the second phase.

There is some choice about the site of the external opening when it is to be man-made. Salmon's law (Fig. 3) will help determine this choice. This law states that if an imaginary line is drawn between the ischial tuberosities it will divide the anal canal into an anterior and a posterior part, the latter being slightly larger. All external fistulous openings posterior to this line will be connected by a tract with an internal opening at the posterior midline. All external fistulous openings anterior to this line will be connected by a tract extending radially with an internal opening. The exception to the rule is that external openings anterior to the line situated more than about 5 or 6 cm. from the anal margin usually have a tract extending to an internal opening in the posterior midline. By applying this rule at the time of incision and drainage of an abscess the external opening can be made at the most favorable site in view of the fistula operation which will be necessary at some future date.

After the acute inflammatory reaction has subsided fistulectomy should be done. If the fistula is allowed to remain it may act as a focus of infection, abscess formation may recur with possible extension of the fistulous tracts or there may be a dense deposit of scar tissue due to chronic infection. This is especially undesirable about the sphincter. One of the main problems in fistulectomy is to eradicate the source of infection; the diseased crypt and duct. This is done by excising it. The preferred method is to incise the tract and excise infected and scar tissues, being careful not to remove a piece of the sphincter. The incision should be made to extend far enough onto the skin surface to allow the internal portion to heal before the external portion. The wound should be V-shaped and allowed to heal by secondary intention, making sure there is no bridg-

(Continued on Page 360)

Pneumococcic Meningitis Following Head Injuries

By Moses Cooperstock, M.D.
Marquette, Michigan

THE TRUE INCIDENCE of pneumococcic meningitis following cranio-cerebral injuries is not exactly known, but judging from statistics published from hospital services devoted to the care of communicable diseases, the incidence appears to be low. For example, in a series of sixty cases of pneumococcic meningitis treated at the Sydenham Hospital, Baltimore, and the Department of Pediatrics, Johns Hopkins Hospital, from 1938 to 1943, in only one case could a history of head injury be elicited.[4] In another series consisting of fifty-six cases reported by Sweet et al.,[8] three were associated with head injuries. The frequency may be higher on surgical services where such accidents are treated. Munro[7] in a large surgical experience with cranio-cerebral injuries found staphylococci to be the most common organism responsible for meningitis complicating head injuries of all types. Pneumococci were only occasional offenders.

Pneumococcic meningitis is especially prone to occur in compound fractures of the skull involving the paranasal sinuses, cribiform plate of the ethmoid bone or the region of the ear and mastoid through communication established between the subarachnoid and the outside.[1] The escape of cerebrospinal fluid through the nose or ear canal heralds the establishment of such communication and the appearance of cerebrospinal rhinorrhea or otorrhea indicates the imminence of meningitis. Usually, cerebrospinal rhinorrhea occurs early in head-on injuries to the forehead. It may occasionally be delayed in its appearance due to a sealing off of the dural laceration, only to appear later as a result of sneezing or attempts to clear the nose. Cerebrospinal rhinorrhea and otorrhea may be masked by admixture with blood. A comparison of the red cell count of the hemorrhagic discharge in such cases with that of the peripheral blood will help indicate the presence or absence of cerebrospinal fluid.

From the Northern Michigan Children's Clinic.

It is interesting to note that pneumococcic meningitis may occur long after head injury. Etienne-Martin and Pechoux[3] reported a case in which meningitis occurred six months after fracture of the petrous bone. Linell and Robinson[6] in a study of seven autopsied cases, observed three instances in which pneumococcic meningitis developed two and one-half, five and fourteen years after head injury. Pneumococcic meningitis complicating skull fracture may also be of a recurrent nature.[2] The recurrent cases of pneumococcic meningitis of Labby[5] and Tillet[9] developed their initial attacks of meningitis fourteen and two years respectively after their skull fractures.

The instances of recovery from meningitis complicating head injury have been rare. The patient with recurrent meningitis reported by Elvidge and Roseman[2] was successfully treated with sulfapyridine, specific antisera, forced drainage and supportive measures. The patient of Labby[5] and Tillet[9] each responded successfully both with sulfadiazine alone and with sulfadiazine and penicillin in combination. One of the three cases reported by Sweet et al.[8] survived with the employment of penicillin, specific antisera and sulfadiazine.

The following is a report of the occurrence of pneumococcic meningitis complicating head injury with recovery in two children. In one child, the meningitis was associated with cerebrospinal rhinorrhea and in the other, with cerebrospinal otorrhea. Recovery occurred with the employment of sulfadiazine and specific antisera.

Case Reports

Case 1.—R. H., a boy, five years old, was admitted to the hospital August 13, 1942, with a history of a fall from a tractor three days previously resulting in injuries about the face. On admission, the boy was in a stuporous condition. His temperature was 104.6°. A marked depression was present over the bridge of the nose with associated ecchymoses about the eyes. A vertical fracture of the maxillary bone with palpable deformity of the inferior rim bilaterally could be made out on physical examination. Clear cerebrospinal fluid was escaping through the nose. Roentgenograms corroborated the presence of multiple fractures of the bones of the face involving the anterior wall of both maxillary sinuses.

Within twenty-four hours after admission to the hospital, the patient became irrational, developed projectile vomiting and meningeal signs. Spinal fluid obtained by lumbar puncture revealed a cloudy fluid containing 1,560 white blood cells per c. mm. and many gram-positive diplococci on direct smear. Culture of both the spinal fluid and blood revealed pneumococcus, type 21.

During the first twenty-four hours, he received 2 gm. of sodium sulfathiazole intravenously, 2.5 gm. sulfathiazole and 2.0 gm. sulfadiazine by mouth (sulfadiazine would have been the sulfonamide of choice, but this drug as well as sulfathiazole became unavailable). During the second twenty-four hours, the patient received 4.0 gm. sodium sulfapyridine intravenously and on the following day, 3.0 gm. sodium sulfapyridine intravenously. On this day, 30,000 units of type 21 anti-pneumococcus rabbit serum was given intravenously. A larger dose was intended, but intravenous serum was discontinued because of severe serum reaction. Beginning with the fourth day, sulfapyridine was given by mouth, 6.0 gm. daily and this dose was maintained for the next five days, following which the dose of the drug was gradually decreased. In addition, the patient received 200 c.c. of whole blood by intravenous transfusion because of the development of secondary anemia (hemoglobin 60 per cent; red blood count 3,060,000).

By the fifth day of his hospital admission, the patient's temperature had steadily dropped to normal and remained within normal limits thereafter. He was alert and well oriented by the sixth day. His cerebrospinal rhinorrhea had ceased by the eighth day. He was discharged twenty-six days after admission to the hospital. The patient was periodically examined for the following two years. Except for the facial deformity produced by the fracture of the maxillary bones, he presented no residual abnormalities.

Case 2.—R. H., a boy, two years old, was admitted to the hospital June 22, 1943, with a history of a fall down a flight of stairs six hours previously. He did not develop unconsciousness or convulsions, but vomited several times.

The child appeared ill on his admission examination. His pulse was rapid, but was of good quality. His temperature was 100.2°. There was no detectable evidence of skull fracture except for the presence of cerebrospinal otorrhea on the right side. Roentgen studies of the skull showed no definite evidence of fracture, although there was definite clouding of the right mastoid interpreted as indicating the presence of hemorrhage into the mastoid cells.

Up to the third day, the child was treated expectantly. On this day his temperature which had been normal abruptly rose to 103° and he developed symptoms of drowsiness, vomiting and stiff neck. A lumbar puncture performed on the fourth day disclosed the presence of cloudy spinal fluid containing 29,200 white cells per c. mm. The Pandy test was positive and sugar was absent in the spinal fluid. Numerous Gram-positive diplococci were present on direct smear. Culture of the spinal fluid revealed pneumococcus, type 11.

The patient was given 1.5 gm. sulfadiazine by mouth as an intitial dose and 0.5 gm. every four hours thereafter. On this dosage, the patient's temperature gradually reached normal by the seventh day and remained normal until the ninth day of admission when it again became elevated (103°). The spinal fluid white cell count at this time was found to be 80,000 per c. mm. The dose of sulfadiazine was increased from 3.0 gm.

to 4.5 gm. daily and in addition he was given 100,000 units of typespecific, antipneumococcic rabbit serum, 85,000 units intravenously and 15,000 units intrathecally. This was followed by a gradual return of the child's temperature to normal by the seventeenth day and it remained normal thereafter, the patient showing concomitant improvement with the disappearance of fever.

The cerebrospinal otorrhea which was clear and copious on admission became frankly purulent one week after admission and this purulent aural discharge persisted for approximately one month, gradually disappearing. Oral sulfadiazine in gradually reduced dosage was administered for approximately one month after the temperature had dropped to normal. He was discharged seven weeks after admission from the hospital without any apparent residual abnormalities.

Comment

Early operative exposure and repair of the dural tear in the case of skull fractures producing cerebrospinal rhinorrhea is a recommended, emergency, surgical procedure[1] as a measure to prevent meningitis. However, in the case of fractures of the temporal bone involving the middle ear and resulting in cerebrospinal otorrhea, surgical repair of the dural laceration is considered not only a more difficult procedure, but usually one not attended by success. Conservative management appears to be the best form of treatment in such cases. The fact that pneumococcic meningitis complicating craniocerebral injuries of the types illustrated by the two cases reported here can respond successfully to chemotherapy indicates that the sulfonamides offer a powerful weapon not only in the actual development of meningitis, but also strongly suggests its probable value as a prophylactic measure against the development of this dread complication. The therapeutic role of typespecific rabbit serum employed in these two cases was probably a secondary one, since the dosage administered, especially in Case 1 was considerably lower than that successfully used in combination with sulfonamides.[4] Penicillin should constitute an additional prophylactic and therapeutic ally. In fact, recent reports indicate that the combined use of sulfonamides and penicillin yields the best results in the management of pneumococcic meningitis.[8,10]

Summary

Pneumococcic meningitis complicating craniocerebral injuries constitutes an imminent possibility in compound fractures of the skull involving the paranasal sinuses, cribiform plate of the ethmoid bone or the region of the ear and mastoid, especially when accompanied by escape of cerebrospinal fluid. Reported recoveries have been rare.

Two instances in children are described of pneumococcic meningitis, one following a compound fracture involving the paranasal sinuses with resulting cerebrospinal rhinorrhea and the other following an injury to the mastoid producing cerebrospinal otorrhea.

Both children recovered with conservative treatment, employing sulfonamide therapy and typespecific rabbit serum. The outcome in these two cases suggests the importance of the early employment of such potent present-day agents as the sulfonamides, penicillin and specific antisera, not only in the established complication of pneumococcic meningitis, but also from a prophylactic point of view.

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NOTE: Since this paper was submitted, three additional instances of pneumococcic meningitis following craniocerebral injury have appeared in the literature.

Hartman et al. reported one instance among thirty-four patients with recovery in which sulfapyridine and antipneumococcus serum were employed.

In a series of sixty-seven consecutive cases of pneumococcic meningitis treated with penicillin, Applebaum and Nelson reported two cases with recovery.

Applebaum, E., and Nelson, J.: Penicillin in the treatment of pneumococcic meningitis. J.A.M.A., 128:778, (July 14) 1945.

Hartmann, A. F., Love, F. M., Wolff, D., and Kendall, B. S.: Diagnosis and management of severe infections in infants and children: A review of experiences since the introduction of sulfonamide therapy. IV Pneumococcus meningitis. J. Ped., 27:115, (Aug.) 1945.

MSMS

Wagner-Murray-Dingell Bill

Notice of hearings in the Senate Committee for April 3, 1946. The AMA has been assigned April 17, 1946. The group most interested gets one day, but may submit written testimony.

The Diagnosis and Treatment of Meningitis

By Jacob S. Fine, M.D.*
Dallas, Texas
and
Franklin H. Top, M.D.†
Detroit, Michigan

DURING THE PERIOD from January 1 to December 31, 1943, 519 patients were admitted to Herman Kiefer Hospital with the referred diagnosis of epidemic or meningococcic meningitis. This diagnosis was verified in 316 cases (60 per cent). Of the remainder, 107 cases (20 per cent) represent other types of infection involving the central nervous system. Moreover, ninety-five cases (19 per cent) were conditions that frequently simulate meningitis. The final diagnoses for all of the cases are enumerated in Table I. The purpose of this report is to describe certain observations in connection with the differential diagnosis of meningitis in general and of meningococcic meningitis in particular. Since all cases of meningitis were treated with the sulfonamide drugs, a consideration of the treatment will be undertaken. It is hoped that these observations will be of value to the practitioner of medicine, upon whom largely rests the responsibility for the early diagnosis and treatment of diseases of the central nervous system.

TABLE 1. FINAL DIAGNOSIS OF 519 CASES ADMITTED TO HERMAN KIEFER HOSPITAL WITH THE REFERRED DIAGNOSIS OF EPIDEMIC MENINGITIS

Jan. 1, 1943 to Dec. 31, 1943

Diagnosis	Number of Cases	Incidence per 100 Cases
Meningococcic meningitis	316	60.88
Meningococcemia	8	1.54
Pneumococcic meningitis	23	4.43
H. influenzae meningitis	11	2.12
Other types of purulent meningitis	5	0.96
Purulent meningitis, type undetermined	26	5.01
Lymphocytic meningitis, type undetermined	12	2.31
Tuberculous meningitis	7	1.35
Encephalitis	6	1.16
Poliomyelitis	7	1.35
Brain abscess	3	0.58
Spontaneous subarachnoid hemorrhage	8	1.54
Infections of upper respiratory tract	40	7.71
Primary pneumonia	12	2.31
Typhoid and paratyphoid, dysentery	8	1.54
Bacterial endocarditis	3	0.58
Measles	5	0.96
Other conditions occurring once	19	3.66
Total	519	100.00

Meningococcic Infection and Meningococcic Meningitis

Meningococcic infection stems from the nasopharynx. During epidemics the vast majority of persons harbor the organism in the nose and throat without any signs or symptoms; that is, they become carriers of meningococci. When apparent infection results, considerable variations are found in the clinical features of the infection. The organism may remain localized in the nasopharynx, producing a mild nasopharyngitis, indistinguishable from the "common cold." On the other hand, the meningococcus may invade the blood stream producing a fulminating meningococcemia, followed by death within a few hours from the onset of symptoms. More often the organism upon entering the blood stream localizes in one or several tissues of the body, most commonly the skin, mucous membranes, joints or meninges. Meningitis is perhaps the most dramatic manifestation of the septicemia. The signs and symptoms of the meningeal irritation and the increased intracranial pressure frequently overshadow the underlying picture of the general sepsis.

In the typical case of meningococcic meningitis the patient suddenly feels extremely weak and aches all over. A few hours later he feels chilly, then feverish, and has to go to bed. His head begins to ache, at first a dull generalized ache, which gradually increases in intensity. He becomes nauseated and begins to vomit. The next day the headache is intense. It is described as a severe pounding, excruciating pain, worse than anything the patient has ever experienced, and is not relieved by the usual remedies found in the home. The neck is stiff and painful, and the pain is aggravated by motion. Nausea and vomiting may recur several times. Pain develops in the muscles and joints. A petechial skin rash is frequently noted but often may be missed. Prostration and aching are profound, the patient becomes increasingly lethargic and irritable, and by the third day delirium or coma may supervene. In about one-

*Children's Medical Center, Dallas, Texas. Formerly Acting Medical Director, Communicable Disease Service, Herman Kiefer Hospital, Detroit, Michigan.
†Medical Director, Herman Kiefer Hospital, Detroit, Michigan.

TABLE II. DISTRIBUTION OF 316 CASES OF MENINGOCOCCIC MENINGITIS BY AGE GROUPS AND BY NUMBER OF CASES, DEATHS, AND FATALITY RATES, HERMAN KIEFER HOSPITAL

Jan. 1, 1943 to Dec. 31, 1943

Age Group	Number of Cases	Total deaths	Gross Fatality Rate	Deaths Occurring Within 24 Hours	Corrected Fatality Rate
2 mos.–22 mos.	15	1	6.7	1	0.0
2 yrs.– 9 yrs.	61	8	13.1	8	0.0
10 yrs.–19 yrs.	89	7	7.9	2	5.7
20 yrs.–29 yrs.	54	4	7.4	1	5.7
30 yrs.–39 yrs.	39	5	12.8	3	5.6
40 yrs.–49 yrs.	31	8	25.8	1	23.3
50 yrs.–59 yrs.	22	5	22.7	1	19.0
60 yrs.–70 yrs.	5	4	80.0	2	66.7
Total	316	42	13.3	19	7.7
Below 40 years	258	25	9.7		
Above 40 years	58	17	29.3		

third of the cases in this series, prodromal symptoms of a cold or sore throat occurred within a week prior to the onset of the above picture.

Variations in symptomatology are observed during outbreaks of meningococcic meningitis. A fulminating type of infection occurred in 30 per cent of the cases in this study. Within a period of twenty-four hours from the onset of symptoms the patient became comatose or delirious, or presented a picture of prostration and shock closely resembling that seen in surgical shock. Profound coma occurred so abruptly, occasionally without signs of meningeal irritation, that a cerebrovascular accident, uremia, or diabetes was suspected. On the other hand, a small number of patients were observed who gave a history of fever and chills recurring daily for one or two weeks before the onset of meningitis. Occasionally the symptoms were referable to the gastro-intestinal tract, namely, severe abdominal pain with nausea and vomiting and "watery" diarrhea. These symptoms, coupled with fever and prostration, have been responsible for patients being admitted to general hospitals with a diagnosis of intestinal "flu."

Meningococcic infection and meningococcic meningitis may occur at any age. The ages in this series ranged from two months to seventy years. White and colored races were affected equally with respect to their proportion in the population. Table II illustrates the fatality in relation to age. All fatalities under ten years of age occurred within twenty-four hours of admission to the hospital. These cases were of a tragically fulminant nature; the entire disease process, from onset of symptoms to expiration, frequently lasted less than twenty-four hours. As in most types of severe acute infections, the fatality rate among persons over forty years of age is very high. In our series the fatality in this group was three times greater than for the younger patients (Table II).

Sixty per cent of our cases were admitted in an extremely grave condition; that is, they were comatose, delirious, completely disoriented, or in a state of shock. All the deaths occurred among the cases showing the above symptoms. However, it seems impossible to predict the outcome in any individual case, inasmuch as several patients who seemed moribund on admission recovered rapidly. In general, if the patient in coma failed to respond within forty-eight hours after treatment was begun, the prognosis was extremely poor. On the other hand, every patient who was oriented and not in shock on admission to the hospital recovered and the majority were acutely ill.

The diagnosis of meningococcic meningitis is not difficult, particularly during an epidemic. In this series 70 per cent of the cases had a rash involving the skin and often the conjunctivae. The rash was of a petechial or purpuric nature and could be found anywhere in the skin, but most frequently on the chest and extremities. Occasionally, nodular, erythematous, maculopapular lesions were observed, simulating erythema nodo-

sum. Herpes labialis was noted in 15 per cent; these lesions rarely appeared before the third day of the disease. Usually there was some evidence of pharyngitis; the throat was red and often a post-nasal mucopurulent exudate was present. In some instances the tonsils were covered with a spotty follicular exudate. The significant findings, however, were neurological and consisted of the positive meningeal signs, namely, stiff neck, Brudzinski and Kernig signs. The Babinski sign was rarely found in this series, and was of little value in diagnosis. Likewise, the tendon reflexes were of no practical diagnostic significance. In some cases they were exaggerated, in others, absent.

Lumbar puncture usually revealed a cloudy or grossly purulent fluid. The average cell count was about 5,000 cells per cmm. The sugar was almost invariably markedly reduced (less than 10 mg. per cent, and the protein was markedly increased (100-200 mg. per cent). Gram-negative intracellular or extracellular diplococci were usually found on stained smear of the sediment, and culture of the fluid revealed the meningococcus in most cases. Early in the course of the disease the organism was frequently isolated from the blood.

Treatment of Meningococcic Meningitis

Sulfanilamide, sulfapyridine, sulfathiazole, sulfadiazine, and sulfamerazine are all effective in the treatment of meningococcic meningitis. Experience to date leads to the belief that sulfadiazine is the drug of choice in that the patient appears to recover from stupor and delirium more rapidly. Moreover, the drug is usually well tolerated, and serious toxic reactions are few. In a few cases in which renal complications occurred and where it was necessary to continue with chemotherapy, we have used sulfanilamide because of its greater solubility. Although our experience with sulfamerazine in this group of cases was not sufficiently great to make any accurate comparison with sulfadiazine, we have gained the clinical impression that the drug is probably as efficient as sulfadiazine and that toxic reactions are remarkably few.

We shall attempt to describe the general principles of treatment which, in our experience, proved very useful. As soon as the diagnosis of meningitis was established by the presence of cloudy spinal fluid, the blood was cultured and the patient received the sodium salt of one of the sulfonamides intravenously. Since we were dealing with large numbers of patients who were admitted in an extremely grave condition, we felt it was important to administer large amounts of the drug parenterally on admission to the hospital to ensure adequate dosage of drug in the early phase of the disease. The dosage of the drug varied with the age and weight of the patient, and the apparent severity of the infection.

As a rule, adults received sodium sulfadiazine in an initial dose of 5 gms. in 100 c.c. of distilled water intravenously, followed by 1,000 c.c. of 5 per cent or 10 per cent dextrose in physiological salt solution. Six hours later 1 to 1.5 gms. of sodium sulfadiazine in 100 to 200 c.c. of physiological salt solution was given subcutaneously. This dosage of sodium sulfadiazine was continued subcutaneously every six hours until the patient had regained consciousness to a degree which permitted subsequent administration by mouth. In general, only four or five clyses of the drug were necessary. Thereafter, sulfadiazine, 1 to 1.5 gms., was given orally every four to six hours. Generally, there was marked clinical improvement on the fifth or sixth day of treatment, and the dose of the drug was decreased to about one-half. Sulfadiazine was discontinued completely if the patient displayed clinical well-being with the temperature normal for forty-eight hours, and with meningeal signs completely absent. The average duration of sulfonamide therapy was nine days, and the patient was discharged on the eleventh hospital day for further convalescence at home.

The dosage mentioned above is based upon body weights of approximately 150 pounds. Proportionately smaller doses were given to children and patients weighing less than 150 pounds. For example, a patient weighing 75 pounds would receive one-half the average adult dose. A relatively greater amount of the drug should be given to critically ill infants. An initial intravenous dose of 5 per cent sodium sulfadiazine or an initial subcutaneous dose of 1 per cent sodium sulfadiazine containing the equivalent of 1 gr. per pound of body weight is indicated. This should be followed every six hours by a subcutaneous administration of 1 per cent sodium sulfadiazine containing the equivalent of ¼ gr. per pound of body weight. The oral dosage of sulfadiazine consists of a total of 1 gr. per pound of body weight per twenty-four hours divided into four or six equal parts.

The optimum blood sulfadiazine level is not known. The average of the blood sulfadiazine levels taken forty-eight hours after the beginning of treatment was 14 mgms. per cent. However, there was a wide variation in individual cases.

It is imperative to give adequate amounts of fluid, particularly during the first few days of treatment, and most of the fluids have to be given parenterally. Adults must receive at least 3,000 c.c. per day.

The barbiturate and paraldehyde have proven extremely useful for the control of exictement and delirium. Morphine should not be used during the first few days of illness because of its depressant effect upon a patient with increased intracranial pressure. Codiene is useful for the control of headache.

Frequent lumbar punctures are not necessary. In general, the only specimen of spinal fluid obtained was the one on admission. The indication for subsequent lumbar puncture is the determination of progress in a doubtful case or on very rare occasions to reduce dangerously increased intracranial pressure. An evaluation of the clinical picture is sufficient to determine recovery from meningitis.

Complications in this group of cases were relatively few. The most distressing complication was a persistent bilateral eighth nerve deafness which was noted in seven patients. Arthritis involving one or more joints occurred in 19 patients, all of whom recovered completely; and aspiration was necessary in only two cases. Only one infant developed hydrocephalus.

Other Types of Purulent Meningitis

Pneumococcic Meningitis.—Pneumococcic meningitis is probably the most common form of acute purlulent meningitis except during those periods when meningococcic infection is epidemic. Most cases of pneumococcic meningitis are complications of otitis media, mastoiditis, and sinusitis. Pneumonia, acute bacterial endocarditis and skull fracture are other less common sources for this type of infection. In seventeen of our twenty-three cases in this series the primary sources were discovered. They were as follows: otitis media and mastoiditis, eleven cases; sinusitis, three; pneumonia, two; and endocarditis, one. Frequently, the source was not discovered until postmortem examination. Often a pneumococcic infection of the middle ear develops in an insidious manner, producing a few symptoms or signs until the sudden onset of meningitis. In these cases the tympanic membrane may appear normal or only slightly thickened, despite extensive destruction of the mastoid cells. A history of impairment of the hearing for three or four days before the onset of the acute symptoms of meningitis should always arouse suspicion of pneumococcic meningitis secondary to otitis media even when the otological findings are negative.

TABLE III. DISTRIBUTION BY AGE GROUPS OF TWENTY-THREE CASES OF PNEUMOCOCCIC MENINGITIS, WITH NUMBER OF CASES, DEATHS, AND FATALITY RATES, HERMAN KIEFER HOSPITAL

Jan. 1, 1943 to Dec. 31, 1943

Age Group	Number of Cases	Total Deaths	Gross Fatality Rate
Below 40 years	12	4	33.3
Above 40 years	11	9	81.8
Total	23	13	56.5

Any type of pneumococcus may invade the meninges, and there is no apparent relationship between the type of the organism and the gravity of the disease. Type 3 pneumococcus was found most frequently in our series and in every case was associated with otitis media.

Without treatment pneumococcic meningitis is highly fatal. Our group of patients was treated for the most part with sulfadiazine alone and had a fatality rate of over 50 per cent. The disease may occur at any age, and as in meningococcic meningitis the fatality among patients over forty years of age is disproportionately high (Table III).

At one time immediate surgical treatment of infected sinuses or mastoids was thought to be imperative. Our experience indicates that the patient should be treated conservatively and that any surgical procedure should be deferred until the patient's condition has greatly improved. Foci of infection may clear with sulfonamide therapy. However, in such instances, observation should be continued for several months after recovery, because of the possibility that the recovery may be more apparent than real.

Hemophilus Influenzae, Type B Meningitis (Influenza Bacillus, Pfeiffer Bacillus).—Hemophilus influenzae, Type B, meningitis is predominantly a disease of infancy and early childhood. Of the eleven cases in this series, nine occurred in infants

in the first two years of life. The other two were in children three and four years old, respectively. This form of meningitis has no particular relation to epidemic influenza, which is a virus disease of the respiratory tract. H. influenzae meningitis is apparently an invasion of the meninges from the nasopharynx via the blood stream. Meningitis in infancy without the presence of petechial lesions in the skin should provoke a suspicion of H. influenzae infection even during outbreaks of meningococcic infection. Consequently it is imperative to identify the etiologic agent to provide the diagnosis. In infants under one year of age the recognition of meningeal involvement is exceedingly difficult, and clear-cut meningeal signs appear relatively late in the course of the disease. The presence of unexplained fever associated with lethargy, irritability, a high-pitched cry, and a glassy, vacant expression are indications for lumbar puncture. Without treatment practically every infant or young child succumbs to the disease. At the present time, when the use of sulfonamide drugs is combined with type specific anti-influenzal rabbit serum, the prognosis is excellent. Of nine patients treated in this manner only one expired.

Streptococcic Meningitis.—Streptococcic meningitis, like pneumococcic meningitis, is usually secondary to otorhinogenic infections. It is indeed amazing to note that only one case of hemolytic streptococcic meningitis was seen in Herman Kiefer Hospital during the year 1943. This may be explained partly by the unusually low incidence of hemolytic streptococcic infections in the city for that period. Possibly the widespread use of sulfonamides may have been a factor.

One case of Streptococcus veridans meningitis was seen during the same period and this was associated with fracture of the skull.

Staphylococcus Aureus Meningitis.—Staphylococcus aureus meningitis is comparatively rare. Two cases were seen during this period. A history of a furuncle of the face or the presence of staphylococcic infection elsewhere in the body was noted. (The original furuncle was completely healed and not observed on physical examination.)

Diagnosis and Treatment of Other Types of Purulent Meningitis.—Apart from the petechial lesions so commonly associated with meningococcic infections, there are no clinical diagnostic criteria which permit an accurate differential diagnosis of the various types of purulent meningitis. The clinical picture, the symptoms and signs are essentially similar. In general, the presence of a concomitant focal infection such as otitis media or sinusitis make pneumococcic or streptococcic meningitis more likely. The appearance of the spinal fluid and the chemical findings may be similar. The only valid differential factor is the isolation of the etiologic organism from the spinal fluid or blood.

Sulfadiazine is probably the drug of choice in the treatment of all types of purulent meningitis. The general principles of treatment are similar to those outlined in the discussion on meningococcic meningitis with this important exception, that the drug be continued in full dosage for longer periods of time. Moreover, periodic lumbar punctures should be made in these cases to evaluate progress of the disease, since exacerbations and remissions are common, and clinical evaluation alone is often treacherous.

Serotherapy in the Treatment of Purulent Meningitis.—Our experience with serotherapy as an adjunct to the sulfonamides has been limited. In the present series only six patients with meningococcic meningitis and four patients with pneumococcic meningitis received serum in addition to sulfadiazine; only one patient with meningococcic meningitis recovered. It should be added that the above experience does not constitute a fair trial, since all of these patients were moribund on admission.

Penicillin in the Treatment of Purulent Meningitis.—Reports in recent literature indicate that penicillin is an effective agent in the treatment of meningococcic, pneumococcic, streptococcic, and staphylococcic meningitis. Our experience with penicillin in this group of cases has been limited to three cases of pneumococcic meningitis which were refractory to apparently adequate sulfadiazine therapy. The result was unsatisfactory in one case in which the penicillin was administered parenterally alone. In the other two cases rapid recovery followed the combined intrathecal and parenteral administration of the drug. The dosage employed intraspinally was 10,000 units every twelve hours for five days, followed by 10,000 units daily for another five days.

Other Central Nervous System Conditions Simulating Purulent Meningitis

Tuberculous Meningitis.—Tuberculous meningitis is a complication which follows the dissemination of tubercle bacilli from a focus elsewhere in the body, as in the lung or bronchial lymph nodes. The disease occurs most frequently in infants and young children. In most cases there is a gradual onset with few symptoms and little or no fever. The disease is usually not recognized until a later stage, when pronounced evidence of brain disease occurs. Somnolence, bizarre neurological findings, and occulomotor palsies characterize this stage. In one-fourth of the cases a history of contact with tuberculosis is obtained and in three-fourths there is Roentgen evidence of a pulmonary process. The spinal fluid findings are characteristic. The average cell count is 250 cells, mononuclear cells predominating. The sugar is almost always reduced (about 30 mgm. per cent or below), and the protein is moderately increased. The tubercle bacilli are difficult to isolate on stained smear.

From the clinical standpoint alone it is impossible to differentiate tuberculous meningitis from encephalitis. The presence of the reduced value for sugar in the spinal fluid in tuberculous meningitis is an important diagnostic feature. In adults an acute fulminating onset, simulating acute purulent meningitis, occurs more frequently than is commonly realized.

Poliomyelitis.—The symptoms of poliomyelitis often simulate those found in meningitis, namely, headache, fever, stiff neck, pain along the spine, nausea, vomiting and diarrhea. Clinically, there are important differences that make the physician suspect poliomyelitis rather than purulent meningitis. The stiffness of the neck is more voluntary and can be overcome by a steady pressure. Head drop, which occurs frequently in poliomyelitis, has not been observed in our cases of meningitis. The patient with poliomyelitis appears apprehensive and alert in contrast to the lethargy or excitement found with meningitis. Coma and delirium are not seen except in the rare case of polioencephalitis. Weakness and loss of muscle function of the extremities have not been observed in the early cases of purulent meningitis.

The most important evidence in differential diagnosis is obtained from an examination of the spinal fluid. In poliomyelitis the spinal fluid is usually clear or slightly hazy and contains an average of 100 cells per c.mm. Lymphocytes are usually the predominant cell. Very early in the course of the disease polymorphonuclear cells may predominate but patients are usually not seen in this stage by the physician unless an epidemic is present. The sugar content is normal and the protein concentration is moderately increased (50 to 80 mg. per cent).

Lymphocytic Choriomeningitis.—The onset of lymphocytic choriomeningitis is frequently preceded by a minor respiratory infection which subsides before the signs of meningeal irritation appear. The physical signs and the symptoms of meningitis in this disease are essentially similar to those found in any acute purulent meningitis, except that coma and convulsions are unusual. The course of the illness is benign and there are no complications. The spinal fluid shows the following: a cell count ranging from 100 to 1,000 cells per cmm., 90 per cent of which are lymphocytes; the sugar is normal and the protein is normal or slightly elevated.

Isolation of the virus from the spinal fluid or the demonstration of neutralizing antibodies in the blood serums of convalescent patients is the only certain method of making a diagnosis in lymphocytic choriomeningitis. It is impossible both clinically and from the spinal fluid examination to differentiate this entity from preparalytic poliomyelitis, mild forms of epidemic encephalitis and mumps meningitis without parotid swelling.

Encephalitis.—Apart from polioencephalitis, St. Louis encephalitis and equine encephalomyelitis are the only two types of virus encephalitides which have thus far occurred in epidemic form in this country. Like poliomyelitis they occur in the summer. Usually there is an abrupt onset of headache, fever, mental confusion, and signs of meningeal irritation. In severe cases coma and convulsions appear early in the disease. The acute phase of the illness usually subsides in about ten days, and most of the deaths occur within the first three days of the illness. The cerebrospinal fluid reveals slightly elevated protein (60 mgm. per cent), a normal or slightly increased sugar (60-100 mgm. per cent), and a cell count from 50 to 200 cells per cubic millimeter, mononuclear cells pre-

dominating in St. Louis encephalitis whereas polymorphonuclear cells predominate in the early stages of equine encephalomyelitis. The clinical diagnosis of sporadic cases is extremely difficult. The final etiologic diagnosis can be made only with laboratory aid.

Encephalitis lethargica, or von Economo's disease, has been extremely rare in this country during the past ten years. It appeared in 1916, increasing to a peak in 1925, and declined during the next decade. The etiology has never been established. Most of the cases referred to this hospital as "sleeping sickness" have turned out to be tuberculous meningitis.

Our experience with the encephalitides has been limited almost exclusively to the type associated with measles and German measles. The diagnosis is easy because of the concomitant or preceding exanthem. About four to six days after the onset of the rash and the patient has already begun to improve, there is an acute onset of fever and convlusions followed by coma and delirium. In milder forms the patient becomes lethargic and drowsy. Most of these cases show signs of meningeal irritation as well as disturbance in the deep reflexes and positive Babinski signs. Tremors and muscular twitchings are frequently present. The spinal fluid usually reveals 30 to 100 mononuclear cells per cubic millimeter; the sugar is normal; and the protein is mildly increased. In one-fifth of the cases the spinal fluid findings are normal. Sequelae in the form of mental retardation or emotional instability are common.

Brain Abscesses.—In our experience, intracranial abscesses are nearly always secondary to suppurative disease located in the lung, middle ear, mastoid cells and paranasal sinuses. The diagnosis of brain abscess is made more often by the history and course of the disease than by the general symptoms, which are similar to those found in meningitis. Indeed, it is frequently difficult to distinguish between meningitis and abscess, since an area of localized meningitis is often found adjacent to an abscess. Localizing neurological signs, usually a hemiplegia, occur when an abscess invades the motor area of the cerebral cortex. However, a large proportion of these lesions, often of considerable size, may exist in "silent" areas of the brain without any definite signs of symptoms. In general, the cerebrospinal fluid is slightly turbid, containing 200 to 500 cells per cubic millimeter, predominantly polymorphonuclears. The total protein is slightly increased (50 to 80 mgm. per cent); the sugar is normal; no bacteria are present.

Spontaneous Subarachnoid Hemorrhage.—Spontaneous subarachnoid hemorrhage is usually the result of rupture of a pathological artery of the brain. In younger individuals rupture of an artery immediately adjacent to the subarachnoid space, usually an aneurysm in or near the Circle of Willis, occurs most frequently. In patients over fifty years of age, particularly in those associated with hypertension, intracerebral hemorrhage occurs with ultimate extension of the bleeding to the ventricles or subarachnoid space. Occasionally a rapidly growing brain tumor may give rise to subarachnoid hemorrhage.

In spontaneous subarachnoid hemorrhage there is a sudden onset of headache and a change in the mental state which may vary from mild mental retardation to profound coma. Stiff neck is present. Usually there is a slight fever and a mild leukocytosis. This condition is easily differentiated from meningitis by the presence of a bloody spinal fluid, on lumbar puncture.

Other Conditions Simulating Meningitis

Grippe, influenza, or streptococcic sore throat present a picture similar to acute meningococcic septicemia, with headache, chilliness, chills, backache, muscle ache, vomiting, and prostration. In infants and children more alarming manifestations may occur, such as convulsions, extreme irritability, drowsiness, or stupor. Frequently resistance of the neck to flexion is present. This is due more often to pain or enlarged, tender, deep cervical nodes than to the true rigidity of muscle spasm found in purulent meningitis. Eight per cent of cases referred here as meningitis fall into this category. Likewise, a number of cases of meningococcic infection were first diagnosed as influenza or streptococcic throat by the physician before the true nature of the disease became evident. From a practical point of view patients presenting such symptoms, particularly during outbreaks of meningitis, should receive sulfonamides. The temperature is not a safe guide as to the probable severity of the infection. Of greater importance is the general appearance of the patient, particularly the degree of prostration present.

Especially in infants and young children cerebral symptoms may dominate the picture in certain cases of primary pneumonia, typhoid, Salmonella infections, and dysentery. There may be an abrupt onset marked by a sudden rise of temperature and vomiting, followed by chills and headache. Convulsions, delirium or stupor may occur. Stiff neck as well as other signs of meningeal irritation may be present. Without a lumbar puncture it may be impossible to exclude meningitis. Occasionally otitis media in infancy presents an alarming picture, characterized by severe nervous manifestations and convulsions.

The cerebrospinal fluid in these cases is usually under increased pressure but in all other respects is normal except that the sugar content may be mildly increased. This is probably due to the concomitant increase in the blood sugar, frequently found at the onset of acute infectious disease. On a rare occasion a meningitis with recovery of typhoid or Salmonella organisms from the cerebrospinal fluid may be seen. We have noted one such case in this present series.

Summary

During the period from January 1 to December 31, 1943, 519 patients were admitted to the Herman Kiefer Hospital with the referred diagnosis of meningococcic or epidemic meningitis. A review of the final diagnoses of these cases is presented.

The diagnosis and treatment of meningococcic meningitis as well as certain observations pertaining to the differential diagnosis of the meningitides is considered.

MSMS

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making a success of it, has provided a shining example for the rest of the country to follow. What organized medicine has accomplished in this state with the aid of labor unions, large employers and the Blue Cross plan, can become equally effective in other states—and must be, if this nation is not to be forced to swallow the bitter pill of state medicine.—November 9, 1945.

The Epidemiology of Tinea Capitis in Detroit School Children

By Lee Carrick, M.D.
Detroit, Michigan



The number of cases of tinea capitis seems to be increasing in America, especially in the eastern and northeastern-central states, and the number of cases appearing in Michigan is steadily growing.[5,6,13] Most of the cases of ringworm of the scalp being encountered are extremely resistant to local therapy. This can be explained by the fact that the predominant fungus responsible for tinea capitis in the United States and Canada in recent years has been *Microsporon audouini* (Table I), a species which has been notoriously refractory to all treatment short of x-ray epilation of the scalp. As a result, treatment has been unsatisfactory and more and more cases are coming to the attention of the physician. This presents a serious problem to physicians everywhere, especially in urban centers.

In view of the growing epidemiologic importance of tinea capitis, a statistical investigation was carried out between October, 1944 and April, 1945 to determine the incidence of this disease in the school children of Detroit, Michigan and to study certain related problems.

Method

Since the City of Detroit is divided into seven school-health districts (see map of Detroit) it was considered practical to select at random three elementary schools from each district. These schools served as a sample of the city-wide total elementary school enrollment. The principal of each of the twenty-one schools was asked to select

From the Department of Dermatology and Syphilology, service of Dr. Loren W. Shaffer, Professor, Wayne University College of Medicine and City of Detroit Receiving Hospital. Material for this paper is taken from a thesis prepared in partial fulfillment of the requirements leading to the degree of Master of Science in Dermatology and Syphilology.

Dr. Carrick is a Fellow in Dermatology and Syphilology, Wayne University College of Medicine and City of Detroit Receiving Hospital.

TABLE I. INCIDENCE OF FUNGUS SPECIES CAUSING TINEA CAPITIS IN UNITED STATES AND CANADA

Location	Year	Authority	No. Cases	Predominant Fungus	Per Cent
Boston	1899	White[24]	139	M. audouini	94.0
	1923	Greenwood[11]	40	M. lanosum	67.5
Cleveland	1899	Corlett[9]	—	M. audouini	90.0
	1935	Binkley[3]	—	M. audouini	70.0
Buffalo	1899	Wende[23]	90	M. audouini	99.0
Chicago	1915	Beeson[1]	100	Microsporon (species not given)	89.0
	1944	Benedek[2]	140	M. audouini	81.5
Los Angeles	1932	Jacobson[12]	—	M. lanosum	—
St. Louis	1935	Mook[19]	—	"Animal" fungi	—
El Paso	1935	Smith[21]	—	M. audouini rarely found	—
Philadelphia	1935	Weidman[22]	36	M. lanosum and M. felineum	50.0
	1941	Livingood[17]	130	M. audouini	96.2
New York	1935	Lewis[14]	37	M. audouini	54.0
	1939	Lewis[15]	292	M. audouini and M. lanosum	78.9
	1944	Lewis[16]	411	M. audouini	95.4
Lansing	1944	Leeder[13]	620	Causative fungi not determined	—
Flint	1945	Burkett[5]	1145	Causative fungi not determined	—
Detroit	1945	Carrick[6]	56	M. audouini	100.0
Montreal	1924	Burgess[4]	62	M. audouini	29.0
Winnipeg	1933	Davidson[10]	75	M. audouini	57.0
Vancouver	1934	Cleveland[8]	100	M. audouini	100.0

alphabetically every fifth child for examination under the Wood's light*. In this way a sample of 20 per cent among the schools selected was hoped for. Actually, however, the size of the sample was less (16.35 per cent) due to absenteeism on the day selected for examination, failure of some of the children selected to obtain parental consent for the examination plus the fact that some of those chosen were above the age limit (thirteen years) commonly susceptible to tinea capitis and were dropped from the series.

Each student was given a card to be filled out requesting the following information: date of examination, school, child's name, address, age, sex, and color. The teacher was asked to indicate on the card whether, in her opinion, the child's personal hygiene was good, fair, or poor, and her impression of the economic status of the child's family (good, fair, or poor). A space was left for a case number, result of examination under the Wood's light, result of culture for fungi from positive cases, portion of the scalp involved, if positive (occipital, vertex, et cetera), and appearance of lesions.

At the time of the examinations the children filed into a semi-darkened, well-ventilated room and presented their cards to an assistant as they were placed, one by one, under the Wood's light. The examiner's rubber-gloved fingers were run through the hair against the hair currents so as to expose any fluorescent patches of ringworm near the scalp which would have been kept from view by long hair. Upon the discovery of a positive case, the gloved hands were washed in an antiseptic solution and re-checked under the Wood's light for clinging fluorescent hairs before going on to the next child. In this way cross-contamination was avoided. Each child required about thirty seconds for thorough examination of the scalp, and, with this procedure, about 100 children per hour could be examined. In order to keep the line moving rapidly children whose scalps showed fluorescent patches of ringworm under the

*The Wood's light, invented by Robert William Wood, an American physicist, is an ultraviolet light whose rays are passed through a special filter composed mainly of nickel oxide. The best glass, according to Radley and Grant[20], contains 9 per cent of nickel oxide together with silica, barium oxide, potassium oxide, and copper oxide. When a source of ultraviolet light is screened with this glass all the visible rays are absorbed while the ultraviolet rays are transmitted through the filter. Certain substances, such as infected hairs from a case of tinea capitis, fluoresce in a characteristic manner when exposed to the filtered rays in a darkened room.

The first use of the Wood's light in the study of dermatoses, including tineal infections, was by Margarot[18] in July, 1923, and he presented his results before the Congress of Anatomists in Turin in April, 1925.

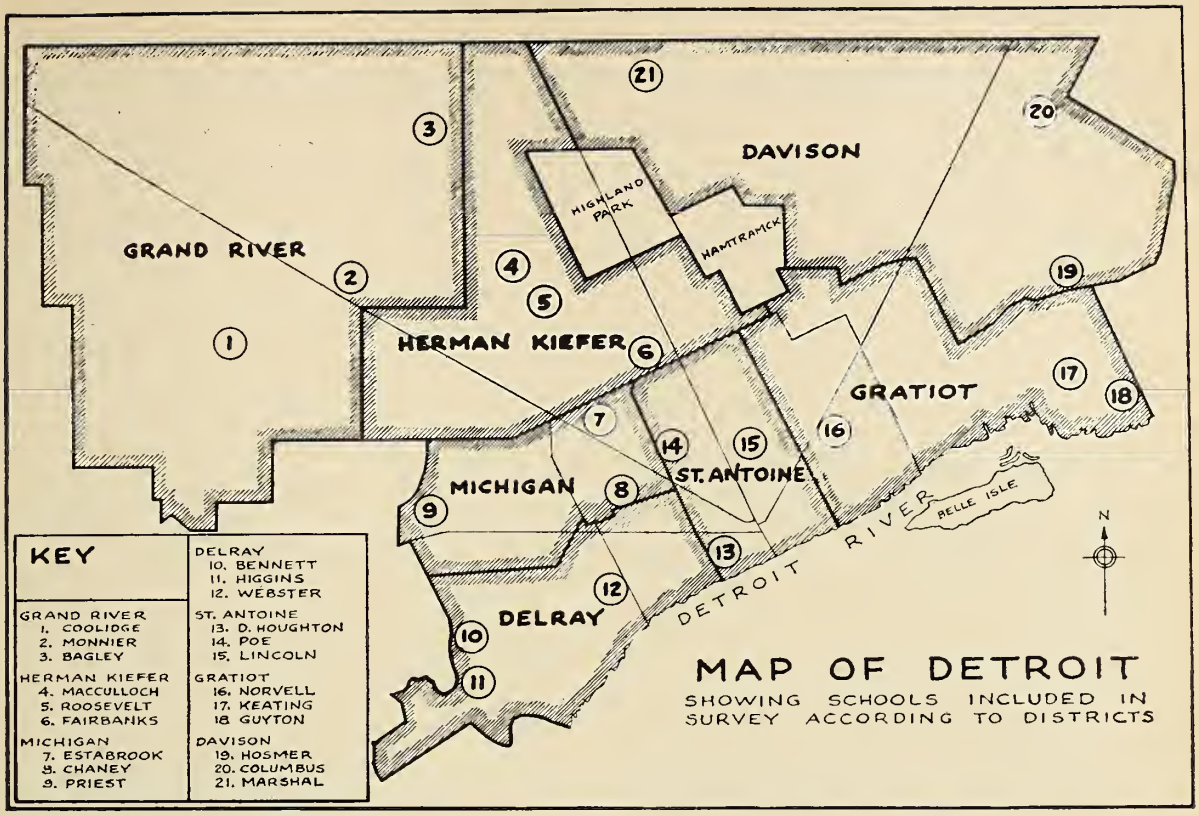


TABLE II. CLASSIFICATION OF DATA COLLECTED IN SURVEY

District	School	School Census	Sample	No. Pos.	Male	Female	White	Col.	Personal Hygiene Good	Fair	Poor	Economic Status Good	Fair	Poor
GRAND RIVER	Coolidge	1320	167	1	85	82	167	0	139	24	4	93	72	2
	Monnier	959	154	1	90	64	154	0	96	47	11	86	64	4
	Bagley	1077	183	1	98	85	183	0	150	30	3	145	38	0
HERMAN KIEFER	MacCulloch	1487	271	1	147	124	271	0	136	110	25	86	170	15
	Roosevelt	1633	205	3	112	93	205	0	118	81	6	83	117	5
	Fairbanks	793	151	6	85	66	151	0	111	34	6	88	59	4
MICHIGAN	Estabrook	758	126	10	62	64	126	0	62	54	10	50	68	8
	Chaney	1110	210	1	114	96	196	14	76	117	17	44	135	31
	Priest	730	117	0	49	68	116	1	66	38	13	45	65	7
DELRAY	Bennett	678	120	0	61	59	119	1	68	47	5	24	93	3
	Higgins	731	94	2	38	56	94	0	51	35	8	22	62	10
	Webster	624	112	2	56	56	96	16	34	61	17	20	65	27
ST. ANTOINE	D. Houghton	669	136	4	70	66	135	1	48	62	26	31	73	32
	Poe	1152	218	6	121	97	204	14	69	109	40	13	141	64
	Lincoln	1401	178	6	94	84	0	178	59	68	51	26	86	66
GRATIOT	Norvell	768	132	9	61	71	5	127	43	65	24	12	68	52
	Keating	1279	223	11	112	111	205	18	138	77	8	100	112	11
	Guyton	814	96	1	48	48	96	0	59	30	7	50	42	4
DAVISON	Hosmer	1042	164	18	88	76	164	0	84	74	6	33	116	15
	Columbus	1149	212	11	114	98	212	0	172	35	5	173	25	14
	Marshall	1631	296	2	152	144	296	0	75	207	14	34	252	10
Total		21805	3565	96	1857	1708	3195	370	1854	1405	306	1258	1923	384

Wood's light were allowed to wait until the entire group had been examined. Then the positive cases were re-examined, one by one, pertinent data recorded on their cards, and fluorescent hairs extracted with sterile forceps and placed between two sterile glass slides. At the laboratory the fluorescent hairs were plated on Sabaroud's maltose agar under a Wood's light and subsequent identification of the fungus was made on gross and micro culture. Duplicate specimens were sent to Duke University for confirmatory culture.

Results and Comments

Of the sample consisting of 3,565 children ex-

TABLE III. DISTRIBUTION OF POSITIVE CASES BY AGE, SEX, AND COLOR

Age	No. Cases	Male	Female	White	Colored
5	5	4	1	3	2
6	12	12	0	10	2
7	14	14	0	10	4
8	19	14	5	16	3
9	14	11	3	12	2
10	19	16	3	16	3
11	6	6	0	5	1
12	5	5	0	5	0
13	2	1	1	1	1
Total	96	83	13	78	18

TABLE IV. INCIDENCE OF POSITIVE CASES BY COLOR

Color	Total No. Examined	No. Positive Cases	Incidence Per 100 Examined
White	3195	78	2.44
Colored	370	18	4.86
Total	3565	96	2.69

TABLE V. INCIDENCE OF POSITIVE CASES BY SEX

Sex	Total No. Examined	No. Positive Cases	Incidence Per 100 Examined
Male	1857	83	4.47
Female	1708	13	0.76
Total	3565	96	2.69

TABLE VI. DISTRIBUTION OF POSITIVE CASES BY SEX AND LOCATION OF LESIONS ON SCALP

Sex	Hairline		Vertex		Generalized	
	No. Cases	Per Cent	No. Cases	Per Cent	No. Cases	Per Cent
Male	65	78	10	12	8	10
Female	2	15	10	77	1	8

TABLE VII. RELATION BETWEEN PERSONAL HYGIENE AND OCCURRENCE OF CASES

Personal Hygiene Classification	Negative Cases		Positive Cases	
	No. Cases	Per Cent	No. Cases	Per Cent
Good	1809	52.1	45	46.9
Fair	1369	39.5	36	37.5
Poor	291	8.4	15	15.6
Total	3469	100.0	96	100.0

TABLE VIII. RELATION BETWEEN ECONOMIC STATUS AND OCCURRENCE OF CASES

Economic Status Classification	Negative Cases		Positive Cases	
	No. Cases	Per Cent	No. Cases	Per Cent
Good	1237	35.7	21	21.9
Fair	1870	53.9	53	55.2
Poor	362	10.4	22	22.9
Total	3469	100.0	96	100.0

amined at twenty-one elementary schools. (Table II), ninety-six (2.7 per cent) were positive for tinea capitis under the Wood's light. On the basis of a total enrollment of 21,805 children thirteen years of age or younger from the twenty-one schools included in the survey, according to this sample the total number of cases of tinea capitis for these schools should approximate 589 cases. Since the approximate city-wide total enrollment of children under fourteen years of age (excluding parochial and private schools) is 220,291, this would mean that there should be about 6000 cases of tinea capitis in the Detroit public elementary schools.

All of the ninety-six cases positive under the Wood's light were due to Microsporon audouini. None of these showed evidence of kerion or secondary infection in the involved areas.

From Table III it will be seen that most of the cases of tinea capitis fell in the age group six to ten years inclusive. These results are similar to those of White[24] (four to nine years), Carrión and Silva[7] (four to eight years), and Benedek and Felsher[2] (four to nine years).

There were eighteen colored and seventy-eight white children with tinea capitis (Table IV). Based on a total sample of 370 colored and 3,195 whites, this means that 4.86 per cent of the colored and 2.44 per cent of the white children had tinea capitis. This agrees with the findings of Livingood and Pillsbury[17] who feel that the Negro race has shown a high susceptibility to ringworm of the scalp.

Of the 1,857 males examined, eighty-three (4.47 per cent) were positive for ringworm of the scalp, while among 1,708 females only thirteen (0.76 per cent) showed evidence of the disease (Table V). Thus the incidence of tinea capitis among the males was nearly six times that among the females.

This ratio of males to females is in agreement with the observations of other investigators, namely, Beeson[1] (5.7:1), Livingood and Pillsbury[17] (6.6:1), and Benedek and Felsher[2] (5.1:1).

TABLE IX. DISTRIBUTION OF POSITIVE CASES ACCORDING TO SCHOOL-HEALTH DISTRICTS

District	Census of Schools Examined	Sample	Number of Positive Cases	Per Cent of Positive Cases
Grand River	3356	504	3	0.59
Herman Kiefer	3913	627	10	1.60
Michigan	2598	453	11	2.42
Delray	2033	326	4	1.22
St. Antoine	3222	532	16	3.00
Gratiot	2861	451	21	4.65
Davison	3822	672	31	4.61
Total	21805	3565	96	2.69

Lewis,[14,15] however, found only three males for each female infected, and Carrión and Silva[7] observed tinea capitis in only slightly greater proportions in males than in females. In general, one is justified in concluding that tinea capitis is much more common in males than in females.

A study was made to ascertain which portion of the scalp was most commonly involved in each sex. As shown in Table VI, 78 per cent of the infected males had ringworm around the hairline (occipital and/or temporal areas), while only 15 per cent of the infected females had involvement in this region. Only 12 per cent of the infected males had vertex involvement, while 77 per cent of the infected females had ringworm in this area. Multiple patches of tinea capitis over the entire scalp (generalized) were found in 10 per cent of the infected males and in 8 per cent of the infected females. In this connection, Livingood and Pillsbury[17] observed that more girls than boys had tinea capitis in the vertex area where the hair is parted and that girls are rarely infected along the hairline and nape of the neck, the length of their hair preventing infected, broken-off hairs from reaching the scalp.

Finally, a word should be said regarding the common assumption that ringworm of the scalp is predominantly a disease of children of low economic status and poor personal hygiene. Carrión and Silva[7], in their study of thirty-five cases in Puerto Rico, found twenty-six (74.3 per cent) in children belonging to poor families living under poor hygienic conditions. The remaining nine cases (25.7 per cent) came from well-to-do families. Likewise, Livingood and Pillsbury[17], of Philadelphia, felt tinea capitis to be related to poverty and poor hygiene. It should be noted, however, that the large majority of the Puerto Rican cases were from a dispensary and the Philadelphia survey was made among families of the lower economic stratum of central south Philadelphia.

Because of this supposed relationship between tinea capitis and poverty and poor personal hygiene, a special endeavor was made in the present study to evaluate these factors statistically. Since the random selection of schools for the survey did not include private schools, the effect of well-to-do families on the result could not be determined. As the map of Detroit shows, however, the schools included in the survey are fairly well distributed throughout metropolitan Detroit, and, in selecting them, no attempt was made to favor one social-economic portion of the city over another. Poor districts as well as upper middle-class areas were given equal representation. The classification of each child as to personal hygiene and economic status was made on the basis of the teacher's personal impression.

A study of Table VII reveals that when the negative cases are compared with the positive cases the latter group includes a smaller percentage of children classified as having good personal hygiene and a larger percentage as having poor personal hygiene. It would seem, therefore, that personal hygiene may have some influence in the occurence of tinea capitis.

Likewise, a study of Table VIII reveals essentially the same findings for economic status, that is, negative cases tend to be associated with good economic conditions and positive cases tend to be associated with poor economic conditions.

As indicated in Tables II and IX, and in the map of Detroit, the highest incidence of tinea capitis occurred in the Gratiot and Davison districts which, in general, are populated by families of middle class, rather than those of poor, economic

status. Although this study shows a high incidence of tinea capitis in colored children and a moderately high incidence in those children classified as of poor economic status and personal hygiene, a markedly higher incidence in these districts (Gratiot and Davison) and a variable incidence in other districts would suggest that economic status and personal hygiene play a rather minor rôle in the distribution of tinea capitis. There is a variation in the incidence in districts suggesting other epidemiologic factors which have not as yet been determined. Incrimination of schools, theater seats, et cetera is hardly warranted on present epidemiologic evidence. Although no significant data was collected in this survey to determine the rôle of the barbershop in the epidemiology of tinea capitis, it would seem justified to suspect hair clippers, especially, and combs and brushes as an important means of spread of this disease. The greater incidence of scalp ringworm in boys plus the more frequent involvement of the hairline area in boys would point toward the unsterilized barber instrument as a source of spread regardless of whether they are used by a barber or by the child's parents at home. This tends to confirm the growing impression that such instruments are probably the most important single means of spread of tinea capitis.

The question of the management of tinea capitis and results of an investigation of some of the newer fungicidal agents effective against Microsporon audouini will be the subject of a future report.

Summary and Conclusions

1. Tinea capitis exists among the Detroit elementary public school children, and all positive cases found in this survey were due to Microsporon audouini.

2. Of 3,565 children selected at random in a city-wide survey, 96 (2.7 per cent) showed evidence of tinea capitis under the Wood's light.

3. On the basis of total enrollment of children susceptible to tinea capitis there are about 6,000 cases of ringworm of the scalp in the Detroit public schools.

4. In this series of ninety-six cases of tinea capitis the greatest number of cases occurred between the ages of six and ten.

5. Six boys for each girl were infected.

6. The percentage of tinea capitis in this survey was greater in the colored than in the white children.

7. In the males the hairline area was most commonly involved, while most of the females had vertex involvement.

8. The results presented would seem to indicate that personal hygiene and economic status may have an influence on the occurrence of tinea capitis but they are not the major factors.

9. Barber instruments, especially hair clippers, should be suspected as an important source of spread of tinea capitis.

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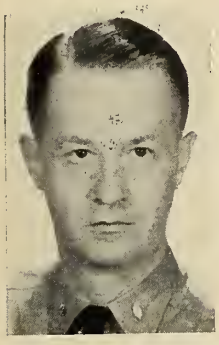
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(Continued on Page 406)

The Effects of Small Doses of Penicillin Administered to Patients with Undiagnosed Early Syphilis

Report of Three Cases

By Comdr. Thomas H. Miller, MC, USNR*



PENICILLIN is the first therapeutic agent to prove of value in the treatment of both syphilis and gonorrhea. Its introduction has been fraught with the usual difficulties attendant upon every attempt to evaluate a new drug or biologic. A problem which has already been cited in the literature is the danger inherent in the use of penicillin in cases where concomitant infection with syphilis and gonorrhea has occurred. Because the curative dose for the latter is but a fraction of that which is considered adequate for the treatment of syphilis, its use may mask the clinical development of an unrecognized syphilitic infection and delay the diagnosis indefinitely. This is likewise true in all instances where small doses of penicillin are administered to persons having undiagnosed syphilis.

Van Slyke[5] called attention to this. He recommended that microscopic examination of lesions be made before penicillin is administered and that a blood test for syphilis be taken sometime after treatment for gonorrhea has been completed. Shafer and Zakon[4] briefly described a case in which 100,000 units of penicillin given for gonorrheal urethritis was followed by a papulopustular eruption and a positive blood serologic reaction several weeks later. The cutaneous lesions healed rapidly under combined arsenical and heavy metal therapy. Canizares[1] reported a case of concomitant infection with gonorrhea and syphilis which was treated with 50,000 units of penicillin thirty-one days following the last sexual contact. A penile ulcer containing spirocheta pallida appeared at the site where a papule had been noted for nineteen days previously. The author advocated that patients who are treated for gonorrhea with penicillin be kept under observation for syphilis for a period of one year or longer. Hailey[3] in reporting a similar case, stressed the desirability of thorough and repeated laboratory studies to rule out syphilis before penicillin is used.

Three cases of gonorrheal urethritis treated with intramuscular injections of 100,000 Oxford units of penicillin are reported. In each instance, an unrecognized early syphilitic infection was present at the time that the penicillin was given. It is hoped that further reports of cases receiving syphilitically inadequate doses of penicillin for gonorrhea or other infections which subsequently present signs and symptoms of early syphilis will be forthcoming. It is desirable that a standard method of diagnostic and therapeutic procedure for the management of such cases be established.

Report of Cases

Case 1.—An adult, colored man, nineteen years of age, was admitted to the hospital on November 26, 1944, complaining of bleeding from the rectum. One month previously, the patient had occasionally noticed a small amount of bright red blood following defecation. Subsequently, he was able to feel a slight depression near the anus and a small blood clot was removed on one occasion. The lesion was not painful. Three days prior to admission, a tender swelling had appeared in the right groin.

According to the record, a urethral discharge had appeared on June 26, 1944, seven days after unprotected sexual contact. The patient did not seek medical advice and the discharge disappeared after he had taken sulfathiazole for four days. There was no further sexual exposure but on July 15, 1944, the discharge recurred. He then reported to sick call and the exudate was found to contain Gram-negative intracellular diplococci. A total dose of 100,000 units of penicillin was administered, the urethritis subsided and the patient was discharged on July 24, 1944. The Kahn blood test was negative on July 20, 1944. The patient denied any sexual contact during the period between his discharge to duty and his re-admission for the present complaint.

Upon physical examination a crateriform ulcer 1 cm. by 2.5 cm. was seen at the border of the anal orifice posteriorly. The borders were slightly raised and indurated and the base consisted of relatively clean granulations. A small, eroded papule was present at the mucocutaneous junction of the prepuce dorsally. A

*The opinions or assertions contained herein are the private ones of the writer and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large.

Comdr. Miller is assistant professor in Dermatology and Syphilology, Wayne University, College of Medicine, on leave of absence. He has been medical officer in the U. S. Naval Reserve since August 21, 1942, and is now on inactive duty, 1305 David Whitney Bldg., Detroit 26, Michigan.

slightly tender, palpable lymph node was present in the right groin. The general physical examination was otherwise essentially negative.

Urinalysis and a complete blood count were within normal limits. The blood Kahn and Kolmer Wassermann reactions were positive. The Frei test was considered negative (4 mm. papule after seventy-two hours). Darkfield examination of material taken from the right inguinal lymph gland and from the penile lesion revealed no spirocheta pallida present on four separate occasions. Several darkfield examinations of serum from the perianal ulcer showed the presence of spirocheta pallida.

In all, 2,400,000 Oxford units of penicillin were administered intramuscularly in sixty equal doses given at three-hour intervals. Daily darkfield examination of the perianal lesion failed to show the presence of any spirocheta pallida after thirty-six hours of treatment, and the lesion was healed on the sixth treatment day. The right inguinal lymph gland remained palpable but was not tender. The blood Kahn and Kolmer Wassermann reactions were positive after completion of treatment.

Except for headache, nausea, and chilly sensations during the first twenty-four hours of treatment, there was no reaction.

Case 2.—On December 14, 1944, a white man, twenty-one years of age, was admitted to the hospital complaining of painless penile lesions.

On October 1 and November 9, 1944, the patient had unprotected sexual intercourse with two unknown individuals. On November 18, 1944, a purulent urethral discharge was noted and a smear of the exudate showed the presence of gonococci. All signs and symptoms had disappeared on November 20 after the administration of 100,000 units of penicillin.

Two days before the onset of the urethritis a number of filiform, penile warts had been treated by the local application of an acid. Darkfield examination of serum from the largest of the lesions was made on November 19, 1944. No spirocheta pallida were seen. All lesions healed completely and the patient was discharged to duty on November 24, 1944.

There was a recurrence of the urethral discharge on December 5, 1944, although there had been no exposure during the interim. It responded satisfactorily to a course of sulfathiazole but the patient reported at sick call eight days later because of the presence of several penile ulcers. These lesions were located at sites where penile warts had previously been destroyed.

Upon physical examination several filiform verrucae were found in the coronal sulcus of the penis near the frenulun. Three ulcers varying in size from 0.5 cm. to 1.0 cm. in diameter were also present in the sulcus. All had perpendicular borders, clear granulating bases and were indurated. No other cutaneous or mucous membrane lesions were present. The peripheral lymphatic glands were universally enlarged and indurated. No further abnormal physical findings were noted.

A complete blood count was within normal limits. Urinalysis showed a few leukocytes and the blood sedimentation rate (Cutler) was 13 mm. per hour. The blood Kahn and Kolmer Wassermann tests were negative. Darkfield examination showed the presence of spirocheta pallida in serum from the penile ulcers on December 14, 15, and 16.

Treatment was instituted on December 17, 1944; 2,400,000 Oxford units of penicillin were injected intramuscularly in sixty equal doses at three-hour intervals. One hour following the second injection there was considerable edema of the prepuce. Continuous cold compresses of normal saline solution were applied and the treatment was not interrupted. The edema subsided during the succeeding thirty-six hours. No other reaction was noted. The penile lesions were reported darkfield negative on the third, fourth, and fifth treatment days and all lesions were healed completely within forty-eight hours after the completion of treatment. The blood Kahn and Kolmer Wassermann tests remained negative.

Case 3.—A colored man, nineteen years of age, was admitted to the hospital on December 16, 1944, because a routine blood Kahn test had been reported positive. The patient had no complaints.

According to the record, the patient had suffered a rupture of the frenulum of the penis on September 26, 1944, during the course of unprotected sexual intercourse. He received no prophylaxis, did not seek medical advice and states that the laceration healed spontaneously within a week. Six days later a urethral exudate containing Gram-negative, intra-cellular diplococci appeared and cleared up without incident following a course of 100,000 units of penicillin injected intramuscularly. There were no further sexual exposures but the urethral discharge recurred on December 10, 1944. The patient again received 100,000 units of penicillin and was discharged to duty on December 12, 1944. Three days later a routine blood Kahn test was positive and he was transferred for admission to this hospital.

According to the patient's record, routine blood Kahn tests were negative on July 13, 1944, and August 19, 1944.

Physical examination showed a rupture of the frenulum of the penis at its mid-portion. A shallow, indurated ulcer was seen at either side of the laceration. The lesions were not excavated or painful, and the bases consisted of clean granulation tissue. No other cutaneous or mucous membrane lesions were present. Except for the universal enlargement of the peripheral lymphatic glands, the general physical examination was otherwise essentially negative.

A complete blood count and urinalysis were within normal limits. The blood sedimentation rate (Cutler) was 11 mm. per hour. The blood Kahn test was positive on two occasions. Repeated darkfield examinations of the penile lesions failed to show the presence of spirocheta pallida. They were demonstrated in a material obtained by the puncture of the right inguinal lymph glands. A spinal fluid examination was completely negative.

Penicillin therapy was instituted on December 21, 1944, and a total dose of 2,400,000 Oxford units was

given. There was some swelling and tenderness of the penile lesions during the first twelve hours. No other reactions were noted and the penile ulcers were healed on the fourth treatment day. The blood Kahn test taken on the day after completion of treatment was positive.

Summary

Three cases in which a diagnosis of early syphilis was made following the treatment of gonorrheal urethritis with penicillin are reported. It is probable that both infections were contracted simultaneously. In Cases 1 and 2 the intramuscular injection of 100,000 units of penicillin did not prevent the development of secondary and primary syphilides, four months and five weeks respectively, after the last sexual contact. In Case 3, the same dose of penicillin failed to produce healing of penile lesions (delayed primary or late nodulo-ulcerative secondary syphilides.) A second course 100,000 units of penicillin administered six days prior to admission also failed to heal the penile lesions or to sterilize the regional lymphatic nodes.

In all instances the treatment of gonorrheal urethritis with syphilologically inadequate doses of penicillin suppressed or delayed early clinical manifestations of syphilis. There was no influence exerted upon the normal development of the blood serologic reaction with the possible exception of Case 2. All cases responded satisfactorily to the further administration of penicillin.

It is surprising that there has not been an even more marked suppression of signs and symptoms in cases of unrecognized early syphilis which have received therapeutically small doses of penicillin for the treatment of other conditions. Perhaps those cases which have been detected are the exception and that many will not be recognized until years later when symptoms of cardio-vascular syphilis, central nervous system syphilis, or other late manifestations of the disease, will be the first indication of an infection of long duration.

By preventing such suppression, therapeutically adequate doses of penicillin if given in all instances where pre-clinical, early syphilis is a possibility would not only protect the future of the individual but would also be a safeguard against transference of the disease during its infectious and infectious relapsing stages.

Conclusions

1. Penicillin may suppress or delay the appearance of early syphilitic manifestations when it is given in therapeutically inadequate dosage.

2. Small doses of penicillin administered to persons with undiagnosed early syphilis may delay the diagnosis indefinitely without preventing the development of infectious lesions.

3. It may or may not influence the normal development of the blood serologic reaction for syphilis.

4. The possibility of producing a penicillin resistant syphilitic infection should be borne in mind.[2]

5. The possibility of the presence of syphilis should be eliminated in all cases where the administration of small doses of penicillin are contemplated.

6. All cases of gonorrhea or other venereal diseases which have received less than 1,200,000 Oxford units of penicillin should receive a careful physical examination and a blood serologic test for syphilis once a month for one year or at least once monthly for three months and every three months for one year. A spinal fluid examination should be made between the sixth and the twelfth month.

7. The routine administration of 1,200,000 or more Oxford units of penicillin to all cases of gonorrheal urethritis even though there may be no past history or present signs or symptoms of syphilis is worthy of consideration. In such an event, an adequate follow-up system such as is carried out following the completion of treatment in diagnosed cases of early syphilis would be indicated.

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MSMS

Sir Joshua Reynolds (1723-1792).—It is the year 1789. Reynolds, finishing a portrait of Lady Beauchamp, is suddenly annoyed by a dimness in his left eye. Rubbing does not remove it and he must leave off work. Within ten weeks, the sight of the eye is entirely gone, and he must give up painting permanently. Though Reynolds has up to this time been practically free from physical disabilities, he accepts this calamity calmly and even cheerfully. A grave liver derangement, diagnosed too late, was the cause of his death three years later. —Warner's *Calendar of Medical History.*

Tidal Irrigation Following Gynecological Operations

By Howard H. Cummings, M.D., and
Rigdon K. Ratliff, M.D.
Ann Arbor, Michigan



ABSOLUTE bladder drainage following plastic operations involving the female bladder and lower genital tract is of primary importance. Continuous and adequate bladder drainage in conjunction with aseptic techniques, posture, and chemotherapy, has made the repair of vesicovaginal fistulae, the correction of urinary incontinence, and the lesser traumatic lesions of the pelvic organs more certain curative procedures.

Following gynecological plastic operations, retention of urine and dysuria are frequent postoperative complications. The normal reflex mechanism of micturition is disturbed by changes in the position of the bladder and urethra. Also the associated pain and discomfort following operations for urinary incontinence, cystocele, procidentia of the uterus, and even perineorrhaphies interfere with urination. Residual urine and marked overdistention of the bladder when relieved by frequent catheterization predispose to urinary infections which may menace not only the successful outcome of plastic operative procedures but also the health of the patient.

Today most civilian hospitals are understaffed with nurses and overloaded with patients. Available trained nurses in these institutions are assigned to the seriously ill, surgical and medical cases. Because of these conditions in our hospitals any device that will lessen the need of nursing care is of great value. With this in mind, one of us (R.K.R.) has developed a simple and inexpensive automatic bladder irrigator which during the past three years has served with entire satisfaction (Fig. 1).

The apparatus works on the principle of the siphon and does not differ in this respect from several other devices, for example, those of Monroe[1] and Webb.[2] It serves effectually in any normal bladder and if desired it can serve also as a cystometer.

The apparatus is shown in the accompanying drawing which is practically self-explanatory. Examination of the diagrams shows that it utilizes materials available in most hospitals or at any supply house. As shown in the illustration, the apparatus is assembled by using the following: discarded Baxter Laboratories bottles—two-liter-graduated-intravenous solution containers, one glass Y-tube, one U-tube, one T-tube, one Murphy drip connector, one twelve-inch length of glass tubing, one Hoffman clamp, one Burrett clamp, one discarded R.B.C. capillary pipette (stem only), one ordinary hospital standard, and rubber tubing of one-fourth-inch caliber connecting the various parts. Excepting for the standard, an outlay of not more than two dollars will provide the apparatus.

The catheter used, though not a part of the apparatus, is an integral part of the system, and we consider its choice very important. At best a catheter is a foreign body and any choice which lessens irritation is acceptable. Consequently, a catheter which is easily introduced, securely retained, and easily removed is the catheter of choice. We believe the No. 18 F. Foley bag catheter to be far superior to the de Pezzer, Malecot, or Robinson catheter.

At the completion of a plastic procedure a No. 18 F. Foley bag catheter is passed and inflated. The catheter is closed by means of a Hoffman clamp and covered with sterile gauze held in place by means of a rubber band. When the patient has been returned to her bed the gauze and clamp are removed and the catheter attached to the sterile tidal irrigator.

The irrigator, minus bottles, is assembled as illustrated, sterilized, and stored as a sterile bundle. At the bedside the reservoir bottle of sterile normal saline solution and the sterile drainage bottle are attached. In the completed setup, the one fixed part is the inverted T-tube, the top of which is at bladder level or approximately 4 cm. below the symphysis pubis. When the patient has recovered from anaesthesia and when the base of the inverted U-tube stands at fifteen cm. above the level of the top of the inverted T-tube, water is allowed to run slowly into the bladder, displacing all air from bladder and system. Approximately 300 c.c. of fluid will be required to fill the bladder

and system before siphonage is initiated through a fifteen c.c. column of water—the heighth of the U-tube above the T-tube. Should the patient complain of fullness before siphonage is initiated the catheter may be left in the bladder for ten days or more.

Most of our patients remain on irrigation for eight days. In our experience four doses daily of

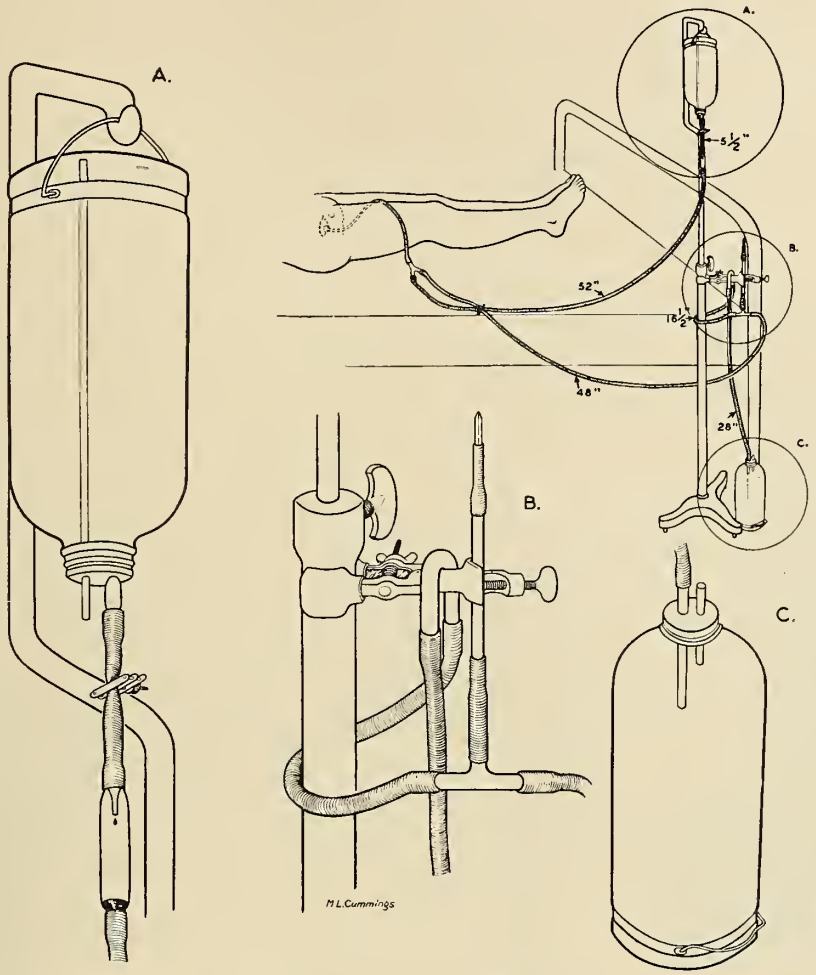


Fig. 1. Diagram of automatic bladder irrigator.

U-tube can be lowered. When the bladder is emptied, suction is stopped by air entering the system through the capillary pipette. The irrigant is adjusted by means of the Hoffman clamp at 60 gtts. per minute. This, plus the rate of urinary output, determines the tidal frequency or irrigation frequency.

Our experience with this type of bladder irrigator has been rather extensive. We have found that its cheapness permits a hospital to have sets of the apparatus sufficient for all patients needing it. When properly set up and adjusted, the apparatus requires no further care except that of refilling the normal saline containers, and the seven and one-half grams of sulfadiazine given at intervals of four hours will maintain a sterile urine throughout the operative convalescence. A few patients, most of whom are of the nervous type, complain of urgency. As a rule, this discomfort can easily be relieved by a mixture of tincture of hyoscyamus and potassium citrate. However, a few with very irritable bladders will not tolerate a catheter in the bladder, and in these patients the apparatus cannot be used. About 98 per cent of our cases were entirely comfortable during their convalescence. In all of these respects we have found the apparatus to be highly satisfactory: the

(Continued on Page 410)

Editorial

1946 DUES NOW PAYABLE

THIS is a reminder to all members who have not yet paid their 1946 dues. The County Secretary is as busy as you and has no time to send out individual statements. Such notices also use needed paper and postage. Your prompt check to the County Secretary will save time and expense as well as clerical effort. The dead line is March 31, 1946.

If each member whose dues and assessments are not yet paid will remit promptly, the work of the Society will go forward. It is not necessary to enumerate the advantages of paid-up membership, but it is a satisfaction to enjoy them.

DUES AND ASSESSMENTS

WHY THE 1946 special assessment? and what is it being used for? What do we get out of the dues we have to pay to the medical societies?" These are some of the questions being asked and answered all over the state. Surprisingly enough the one about the large assessment is asked most often from the region near the center which proposed it.

Medicine is a trade according to the United States Supreme Court, but if it were a union we would have to pay an initiation fee of seventy-five to a hundred dollars to get in, and five dollars or more a month to keep in. That would not include special assessments.

We have had about 40 per cent of our doctors in the military services for from one to five years. They were the younger and more vigorous members, the ones who would gladly pay dues, but their dues have been suspended for the period of their service, and a year after their return. It is estimated that has already cost the society over eighty thousand dollars. We have had two special assessments which have partly made up for the loss, but these assessments were earmarked for special use—public relations.

The medical profession has been woefully weak in public relations, as indicated by the many threats against our very existence, by threats to socialize us, by the EMIC program forced on us against our wills but which we were forced to accept or suffer the charge of being unpatriotic. Good public relations might have foreseen these threats and warded them off.

We have used the radio in Michigan as a force to help our programs. We have now engaged a public relations counsellor, as ordered by the House of Delegates, to extend our activities. The House of Delegates spread a special assessment of twenty-five dollars on each member for the year 1946, and told The Council how to spend it.

An appropriation has been made for continuing the Radio, for newspaper publicity, for a public relations counsellor and his staff, for the Michigan Health Council, for Michigan's share in the work of the Conference of Presidents and other officers in promoting a program of service and of National health legislation that could be enacted into law and to which the profession can give its unstinted support. We are to educate the public on the true implications of unwise legislation, and promote a plan for service that will be much more efficient, vastly less costly, promote individuality, and preserve our profession.

The Michigan State Medical Society has a tremendous job to do in the year 1946. It must be financed. We urge all members who have not already done so to send in their dues and assessments to the County Society Secretary. Under regulations and the rulings of the U. S. Postoffice Department, dues (Subscriptions) must be paid by April 1, or the member is not in good standing.

NATIONAL HEALTH ACT OF 1946

WHAT COULD well be the title of a bill to be enacted by the National Congress. Will it be the so-called Truman Compulsory Health Insurance proposal, being sponsored by Wagner, Murray, and Dingell but which is really the brain child of a group of international labor agitators who are trying to promote socialism in this country as well as in some others? Or will it be the plan proposed by the Conference of President and Other Officers State Medical Societies reported in the December JMSMS and republished in subsequent numbers?

We are again publishing this resolution (page 292) which sets forth a program for health service that would be beneficial to the people; one that

(Continued on Page 360)

Teaching of Medical Economics in Medical Schools

Up to a few years ago the doctor was pretty much of an individualist when it came to matters of medical economics. In his practice he came to know who could pay for his services, and those who could not. He also knew who were on the borderland and adjusted his fees accordingly. If a sick person became a public charge there usually was some local arrangement whereby he was well cared for even if the attending physician got little or nothing for his services.

With changing trends the medical profession has become conscious of the need for more specific plans for the financing of unexpected illness and has gone a long way in leadership to provide workable methods of combatting the uncertainties of sickness. On the other hand it does not accept the responsibility for the economic ills of this country, nor does it wish to fall under the spell of the philosophy of legislated health for that would mean bureaucratic control of our future activities. The doctor must still be the master of his own destiny, and be ever mindful of what is best for his public. He must accept the challenge that lies before him now and familiarize himself with matters of health economics in addition to the vast wealth of scientific knowledge he must acquire. The people are demanding security from catastrophic illness, and rightfully so, and your officers of this State Society have taken the attitude that it is better for all concerned if such security can be attained on a voluntary basis rather than by any system of compulsion.

During the past war years our medical schools have had considerable experience with government control, and most of them will be glad to abandon the streamlining of their courses, and return to their former curriculums. They also realize the present need of teaching economics to members of the senior classes, and I am glad to report that considerable progress has been made with the faculties of the medical schools of this state in co-operation with a committee of The Council of the Michigan State Medical Society to initiate such a teaching program. Lectures will start early enough so that the classes scheduled to graduate during the spring months will be covered. This is a splendid gesture on the part of our medical schools, for it opens the opportunity for the medical society to present the economic ideas of practitioners who are in the open field of service, representing the experiences and needs of the average doctor who makes up the bulk of the State Society. Of the activities of the latter body the student may well acquaint himself for it is the one organization he will want to affiliate with first on completion of his period of training. This program must not be allowed to lag or fall into discard, for it is the intent of your Medical Society and the Medical Schools to secure the utmost benefit from such a program of instruction.

President, Michigan State Medical Society



President's Page

NATIONAL HEALTH ACT OF 1946

(Continued from Page 358)

would cost a mere fraction of the international socialistic scheme.

The matter of cost of national health insurance is worthy of comment. In England where a plan has been in operation for many years it has been found necessary to employ one clerk for every one hundred persons insured, but one doctor for every 1,184 (City of Sheffield). Think what that would mean in this country! There would be upwards of one and a half million federal, state, and local employes to police the sickness insurance system! That gives some idea of the administrative overhead, when it takes twelve employes for each doctor rendering the services. Is it any wonder that 84 per cent of the money goes for administrative overhead?

President Truman reiterated the implication that the private practice of medicine was responsible for the fact that 35 per cent of those examined by selective service were rejected, and proposed compulsory health insurance to cure that defect. Not arguing the gross inaccuracy and patent injustice of his figures, how does he account for England's over 60 per cent of rejections with lower standards than America's Selective Service and thirty years of compulsory sickness insurance?

YOUR STATE DOCTOR

THE JOURNAL of the Tennessee State Medical Association for January, 1946, quotes from an editorial in the *London Daily Sketch,* November 10, 1945:

". . . each of us has a deeply rooted affection for and confidence in our own family doctor. The New Minister of Health scoffs at this idea as nonsensical. According to his ruling, any doctor, so long as he is an approved servant of the State, is good enough for you. . . .

"In his new Hospital Bill, the whole of the medical services of the country will be brought under his control and direction. He will not even trouble to have any prior consultations with the hospitals, the local authorities, or the medical profession. . . . All the voluntary and local authority hospitals will be brought by it under state control. A civil servant appointed by Mr. Bevan WILL INSTRUCT AND COMPEL DOCTORS to work in specified areas. . . .

"Mr. Bevan, with the help of the taxpayers' money may provide buildings, and he certainly will be able to provide some sort of doctors, many of them no doubt very efficient. But if doctors are to be paid not by their patients, but out of public funds, as is the intention, and the amount they receive is to depend not upon the nature of the case and the amount of attention they give to it, but the number of people they are responsible for, he will be substituting that quick, cursory, and dubious panel system so much under suspicion for haste and humbug, for the infallible prescription of personal confidence in one's own selected practitioner. Feudalism at its worst never indulged in such tyrannical folly as this."—*London Daily Sketch.*

A. J. Altmeyer, Chairman, Social Security Board in this JOURNAL, December, 1945 (page 6 of colored insert) says:

"As you know, The British Medical Association, as a result of over thirty years of experience with health insurance, is wholeheartedly in favor of the principle of compulsory health insurance. Indeed, it has assumed leadership in demanding that the present health insurance system be made more comprehensive in terms of persons covered and services rendered."

Which one lied? Mr. Altmeyer or the *London Daily Sketch?*

ON THE RUN . . .

The danger of overinvestigation is likely to grow in an organized medical service, and in an insured population entitled to benefit and compensation.

• • •

. . . Symptoms in causalgia are related to an injury to sympathetic nerve fibers and may be relieved by sympathectomy.

• • •

. . . In ruptured intervertebral disk, many patients recover with rest, leg traction, and back support.

• • •

. . . Carcinoma is likeliest to metastasize in bone from the prostate, breast, thyroid and kidney.

• • •

. . . The extensive association between head injury and psychiatric factors indicates possibilities for lessening disability by psychiatric treatment.

• • •

Cardiac output in the recumbent position is increased by about 25 per cent, counterbalancing the gain from lowered metabolism, heart rate and blood pressure.

MSMS

ANAL CRYPTITIS

(Continued from Page 339)

ing which would leave pockets underneath the healed surface. In dealing with the sphincter several points are worthy of emphasis. Cut the sphincter at only one place at a time, cut the sphincter at right angles to its fibers and do not pack between the ends more than forty-eight hours.

The importance of cryptitis is not apt to be overemphasized. It is a rather insidious disease to which attention is usually directed because of the complications which develop. Infected crypts and ducts should be considered as the possible cause of diseases both local and general.

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Proceedings of Annual Session of the Council

Detroit, January 18-19, 1946

All twenty-one members of The Council, except A. H. Miller, M.D. of Gladstone, whose mother was seriously ill, were present for the 1946 mid-winter meeting held at the Wardell-Sheraton Hotel, Detroit, on January 17, 18 and 19.

Annual Reports Presented

The Council heard the annual reports of the Secretary, Treasurer, Trustee, and Editor. Reports were presented by the three standing committees and six special committees of The Council. Other reports included those of the MSMS Committees on Cancer, Postgraduate Medical Education, Public Relations and Rheumatic Fever Control. T. K. Gruber, M.D., Eloise, reported for the Michigan Delegates on the recent American Medical Association House of Delegates.

Committee Appointments

President R. S. Morrish announced the following additions and changes in personnel of MSMS Committees which were confirmed by The Council:

R. S. Breakey, M.D., Lansing, as Chairman of Joint Committee with State Bar of Michigan relative to Venereal Disease Control.

John Towey, M.D., Powers, as Chairman of Tuberculosis Control Committee.

Arthur C. Curtis, M.D., Ann Arbor, to Venereal Disease Control Committee.

James D. Bruce, M.D., Ann Arbor, was made Chairman Emeritus of the MSMS Committee on Postgraduate Medical Education.

H. H. Cummings, M.D., Ann Arbor, was appointed as Chairman of the Postgraduate Medical Education Committee.

O. O. Beck, M.D., Birmingham, was nominated as the sixth representative from the medical profession to the Board of Directors of Michigan Hospital Service.

The 1945 report of the auditors (Ernst & Ernst) was presented, thoroughly studied and approved.

The detailed budgets for 1946 were developed and approved.

Michigan Medical Service

R. L. Novy, M.D., Detroit, President of Michigan Medical Service, gave a progress report on the sound financial condition of Michigan Medical Service as of January 1, 1946. He reported that the Service is disbursing $400,000 per month for health services; that during 1945 a total of $4,-149,000 was so disbursed, and since the inception of Michigan Medical Service a total of $13,634,-208.25 has been paid. **This represents approximately 88 per cent of income for the provision of services to subscribers. Administration costs are approximately 11 per cent. The subscribers maximum total was 877,000, since slightly decreased on account of strikes to 858,000.**

The Michigan Medical Service has signed a contract with the Veterans Administration to act as fiscal agent between the government and Michigan doctors who desire to render medical care to veterans. Michigan Medical Service has adopted the "Michigan Uniform Fee Schedule for Governmental Agencies" for all its payments.

Elections

L. Fernald Foster, M.D., Bay City, was re-elected Secretary, A. S. Brunk, M.D., Detroit, was re-elected Treasurer and Wilfrid Haughey, M.D., Battle Creek, was re-elected Editor for the coming year. Mr. Wm. J. Burns was reappointed Executive Secretary.

MODERN EVOLUTION

One day two young friends of Charles Darwin decided to play a joke on the great scientist. The boys took the wings of a butterfly, the legs of a grasshopper, the head of a beetle, and the body of a centipede, and very carefully glued these parts together.

Then, placing the manufactured insect in a box, they called on Mr. Darwin.

"Mr. Darwin," they said, "we caught this bug in a field. Can you tell us what it is?"

The scientist examined the insect carefully and then asked, "Did it hum when you caught it?"

"Yes," replied the boys.

"Then," said Darwin, with a twinkle in his eye, "it must be a humbug."—*J. Am. Inst. Homeop.*, Dec., 1945.

VAGINAL CAPSULES
(TUTAG)

FOR LEUKORRHEA

Eliminate Douching and Insufflation

Each capsule contains sulfanilimide 10 grains and lactic acid 20 mgms in a glycerine and vegetable oil base.

A vaginal capsule to assist in restoring the normal acidity of the vagina and inhibit the increase of the trichomonads. Simple to use and economical.

Call or Write for Generous Sample and Literature

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800 BARRINGTON ROAD LENOX 8439 DETROIT 30, MICHIGAN

SECRETARY'S ANNUAL REPORT, 1945

By L. Fernald Foster, M.D., Bay City

The Michigan State Medical Society membership for 1945, the fourth year of World War II, showed a total of 4,686 members, including forty-six Emeritus, Honorary and Retired members and 1,245 Military members. The total paid memberships were 3,395 with net dues of $35,585.36 accruing to the Society. The number of members with unpaid dues for 1945 was fifty-nine. The membership tabulation for the years 1944 and 1945 showing net gains and losses, unpaid dues and deaths is as follows:

MEMBERSHIP RECORD, 1945

County	1944	1945	Military	Loss	Gain	Unpaid	Deatbs
Allegan	19	17	3	2			
Alpena-Alcona-Presque Isle	12	11	6	1			
Barry	10	10	3				
Bay-Arenac-Gladwin-Iosco	49	51	26		2		
Berrien	49	47	10	2		2	
Branch	15	17	8		2	1	
Calhoun	69	67	38	2		1	1
Cass	12	10	2	2		1	
Chippewa-Mackinac	16	14	6	2			1
Clinton	10	10	4				
Delta-Schoolcraft	17	18	5		1		
Dickinson-Iron	16	16	4				1
Eaton	15	14	7	1			1
Genesee	142	136	50	6		2	3
Gogebic	17	16	2	1			
Grand Traverse-Leelanau-Benzie	30	34	12		4		
Gratiot-Isabella-Clare	26	25	12	1			
Hillsdale	20	19	6	1		1	
Houghton-Baraga-Keweenaw	31	28	7	3			
Huron	11	11					
Ingham	128	115	39	13		7	1
Ionia-Montcalm	32	29	10	3			3
Jackson	72	70	28	2			3
Kalamazoo	76	75	41	1		1	4
Kent	181	176	84	5		2	3
Lapeer	12	10	3	2			1
Lenawee	26	25	14	1			
Livingston	14	13	5	1			
Luce	7	5	3	2		1	
Macomb	28	26	11	2		1	2
Manistee	8	9	2		1		
Marquette-Alger	28	28	8			1	1
Mason	7	7	4				
Mecosta-Osceola-Lake	12	9	3	3		3	
Med. Soc. of No. Cen. Cos.	12	12	3				
Menominee	9	11			2		
Midland	15	15	2				
Monroe	26	29	11		3		1
Muskegon	63	62	17	1			3
Newaygo	9	7	1	2			
Northern Michigan	28	24	6	4			
Oakland	114	112	42	2		2	3
Oceana	9	8	3	1			
Ontonagon	4	3		1			1
Ottawa	22	22	9				
Saginaw	68	62	33	6			1
Sanilac	11	10	3	1			
Shiawassee	14	13	8	1		1	1
St. Clair	46	44	7	2			2
St. Joseph	14	16	10		2		
Tuscola	21	13	5	8		6	
Van Buren	20	20	10				2
Washtenaw	157	144	64	13		4	3
Wayne	1,596	1,583	539	13		22	26
Wexford-Missaukee	18	17	6	1			1
	3,493	3,395	1,245*	115	17	59	69

* This total of 1,245 Military Members includes eigbt who died in the Service.

Deaths During 1945

We regretfully record the deaths of the following sixty-nine members during 1945, including eight who died in military service.

Calhoun County—Royal M. Walters, M.D., Battle Creek.
Chippewa-Mackinac County—E. H. Webster, M.D., Sault Ste. Marie.
Dickinson-Iron County—E. B. Andersen, M.D., Iron Mountain.
Eaton County—Phil H. Quick, M.D., Olivet.
Genesee County—John W. Handy, M.D., Flint; Guy C. Matthewson, M.D., Flint; Frederick B. Miner, M.D., Flint.
Ingham County—Harry A. Haze, M.D., Lansing.
Ionia-Montcalm County—*Arthur L. Benison, M.D., Edmore; F. H. Ferguson, M.D., Carson City; F. M. Marsh, M.D., Ionia.
Jackson County—R. W. Chivers, M.D., Jackson; *W. R. Finton, M.D., Jackson; E. G. Wilson, M.D., Jackson.
Kalamazoo County—R. S. Harter, M.D., Schoolcraft; Gordon B. Moffat, M.D., Kalamazoo; *Cbarles E. Osborne, M.D., Vicksburg; Benjamin A. Shepard, M.D., Osbtemo.
Kent County—Clarence H. Barber, M.D., Grand Rapids; Carl F. Snapp, M.D., Grand Rapids; Rowland Webb, M.D., Grand Rapids.
Lapeer County—Merton O. Blakeslee, M.D., Lapeer.
Macomb County—Henry G. Berry, M.D., Mt. Clemens; R. E. Hawley, M.D., St. Clair Shores.
Marquette-Alger County—Vivian H. Vandeventer, M.D., Ishpeming.
Monroe County—J. J. Siffer, M.D., Monroe.
Muskegon County—Ernest D'Alcorn, M.D., Muskegon; S. A. Jackson, M.D., Muskegon; R. G. Olson, M.D., Muskegon.
Oakland County—Frank D. German, M.D., Pontiac; Morrell M. Jones, M.D., Drayton Plains; *Francis Needle, M.D., Pontiac.
Ontonagon County—W. J. Pinkerton, M.D., Ramsay, Michigan.
Saginaw County—J. G. Maurer, M.D., Saginaw
St. Clair County—J. M. Atkinson, M.D., Port Huron; A. L. Zemmer, M.D., Port Huron.
Shiawassee County—George L. G. Cramer, M.D., Owosso.
Van Buren County—J. K. Jamieson, M.D., Paw Paw; Edwin G. Low, M.D., Bangor.

(Continued on Page 370)



ERYTHROL TETRANITRATE MERCK in Angina Pectoris

It is generally agreed that the acute attack of anginal pain is most readily relieved by the prompt removal of the provocative factor, and by the use of nitrites. For this purpose, the rapidly acting nitrous and nitric acid esters, amyl nitrite and nitroglycerin, are considered most useful.

For prophylactic purposes—to control anticipated paroxysms—the *delayed but prolonged action* of erythrol tetranitrate is more effective. Erythrol tetranitrate, because of its slower *and more prolonged action*, is also considered preferable for the purpose of preventing nocturnal attacks.

The vasodilatation produced by Erythrol Tetranitrate Merck begins 15 to 20 minutes after administration, and lasts from 3 to 4 hours.

The properly timed administration of a vasodilator having a sustained effect may prevent the following episodes of angina pectoris:

- **The man who finds it necessary to stop and rest when he walks to the train in the morning.**
- **The man who suffers "indigestion" and "gas" on exertion, or after a heavy meal.**
- **The man who has pain in his chest and arms, and weakness upon any anxiety, anger, or nervous strain.**

ERYTHROL TETRANITRATE MERCK
(Erythrityl Tetranitrate)

For Prolonged Vasodilatation

COUNCIL ACCEPTED AMERICAN MEDICAL ASSN.

ACCEPTED

MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

SECRETARY'S ANNUAL REPORT

(Continued from Page 368)

Washtenaw County—J. F. Breakey, M.D., Ann Arbor; Neil A. Gates, M.D., Ann Arbor; Charles B. Pillsbury, M.D., Ypsilanti.

Wayne County—Jay M. Burgess, M.D. Detroit; Basil L. Connelly, M.D., Detroit; Henry R. Craig, M.D., Eloise; Thomas B. Cooley, M.D., Detroit; *Donald Douglas, M.D., Detroit; George E. Fay, M.D., Detroit; *William D. Frostic, M.D., A. A. Gronow, M.D., Detroit; Stewart Hamilton, M.D., Detroit; Lawrence N. Host, M.D., Detroit; Alpheus F. Jennings, M.D., Detroit; Joseph J. Jonikaitis, M.D., Detroit; Jacob Manting, M.D., Detroit; Vernon S. Lilly, M.D., Detroit; Charles E. McMehen, M.D., Detroit; Edward R. Ridley, M.D., Detroit; Harold F. Sawyer, M.D., Detroit; William J. Seymour, M.D., Detroit; Frank Spencer, M.D., Detroit; Harry F. Stamos, M.D., Detroit; Colletta M. Swaney, M.D., Detroit; H. N. Torrey, M.D., Detroit; William G. Wander, M.D., Detroit; John P. Watkins, M.D., Detroit; *F. L. Watters, M.D., Detroit; *John H. Wax, M.D., Detroit.

Wexford County—John F. Gruber, M.D., Cadillac.

*Died in Military Service.

Financial Status

The books of the Michigan State Medical Society were audited on December 28, 1945, by Ernst & Ernst.

Their published report reveals the following financial conditions: Assets are listed at $123,299.18, and are $25,181.22 more than a year ago. The net worth is $61,460.27 compared to $43,603.13 in 1944. The income from dues was $35,589.86 with a JOURNAL income of $7,695.21, interest of $1,727.90 and miscellaneous receipts of $17,544.45 (repayment by Michigan Medical Service of funds advanced in 1939 and 1940) or a total income of $62,557.42, an increase of $16,956.35 over 1944.

The Society expenses totaled $44,656.53.

The security portfolio consists of high grade bonds, approximately 50 per cent of which are in U. S. Savings and War Bonds. The securities on December 28 totaled $75,270.69, represented as follows:

Securities held by the society	$53,612.25
Securities held by the Postgraduate Medical Education Foundation	21,658.44

Interest received on securities during the year was $1,914.37.

The Postgraduate Medical Education Foundation fund shows a balance on December 28 of $23,400.86 as compared with $18,210.56 one year ago. This increase was due largely to contributions received from the Andrew P. Biddle estate and recent contributions.

The Public Education Fund created by the $10.00 assessment per member amounted to $33,875.00. The balance in this fund on December 28 was $12,150.00.

The JOURNAL had allocated to it from members' dues $5,084.14. Other incomes were from subscriptions, reprint sales, advertising sales, and JOURNAL cuts, making a total income of $45,823.72. The expenses included the salaries and expense amounting to $8,400.00, printing and mailing, $19,241.36, and these with other relatively small expenses made a total of $38,128.51. The income was $7,695.21 over expenses.

Medical Defense Funds showed a balance on December 30, 1944, of $3,301.90. Interest in the amount of $195.00 accrued during the year, making a total of $3,496.90 on December 28, 1945.

At the 1944 House of Delegates, there was ordered a $5.00 assessment on each member for a Veterans' Readjustment Program. This was to provide services to the returning medical veteran in matters of Location, Postgraduate Education and Finance. It later developed that these services could best be established at the County level and through already existing agencies within the State Society. As a result The Council decided to return these funds to the county societies in the amounts as collected. The total amount returned to the county units was $16,871.25.

Summary.—The financial statement of the auditors is complete in every detail of the Society's wartime position. With approximately 1,245 members in the armed forces the impact of war in this one instance reflects, through the remission of dues, a loss of income of nearly $15,000.00 per annum.

The 1945 House of Delegates

Due to travel and convention restrictions of the Office of Defense Transportation, no General Assembly was held in 1945. The House of Delegates, however, convened in regular session on September 17-18, at the Book-Cadillac Hotel, Detroit, and conducted the usual transactions of that body.

County Secretaries' Conference

Since no General Assembly was held in September, the usual Secretaries' Conference was not held at that time. A very successful Secretaries' and Public Relations Conference was held in Detroit on January 28, 1945. This conference was attended by over 180 registrants and its discussions were devoted to the subjects of the "Public Relations Program for the Medical Profession." "Proposed Amendment to Constitution of Michigan"; and the "Physical Rehabilitation Program of the Federal Government."

Committees

Committee activities were maintained at an unusually high level during 1945 despite the fact the travel restrictions were in effect most of the year. A perusal of the various committee activities as published from time to time will attest to the fact that the many long-range committee programs have been maintained, with unusual efficiency.

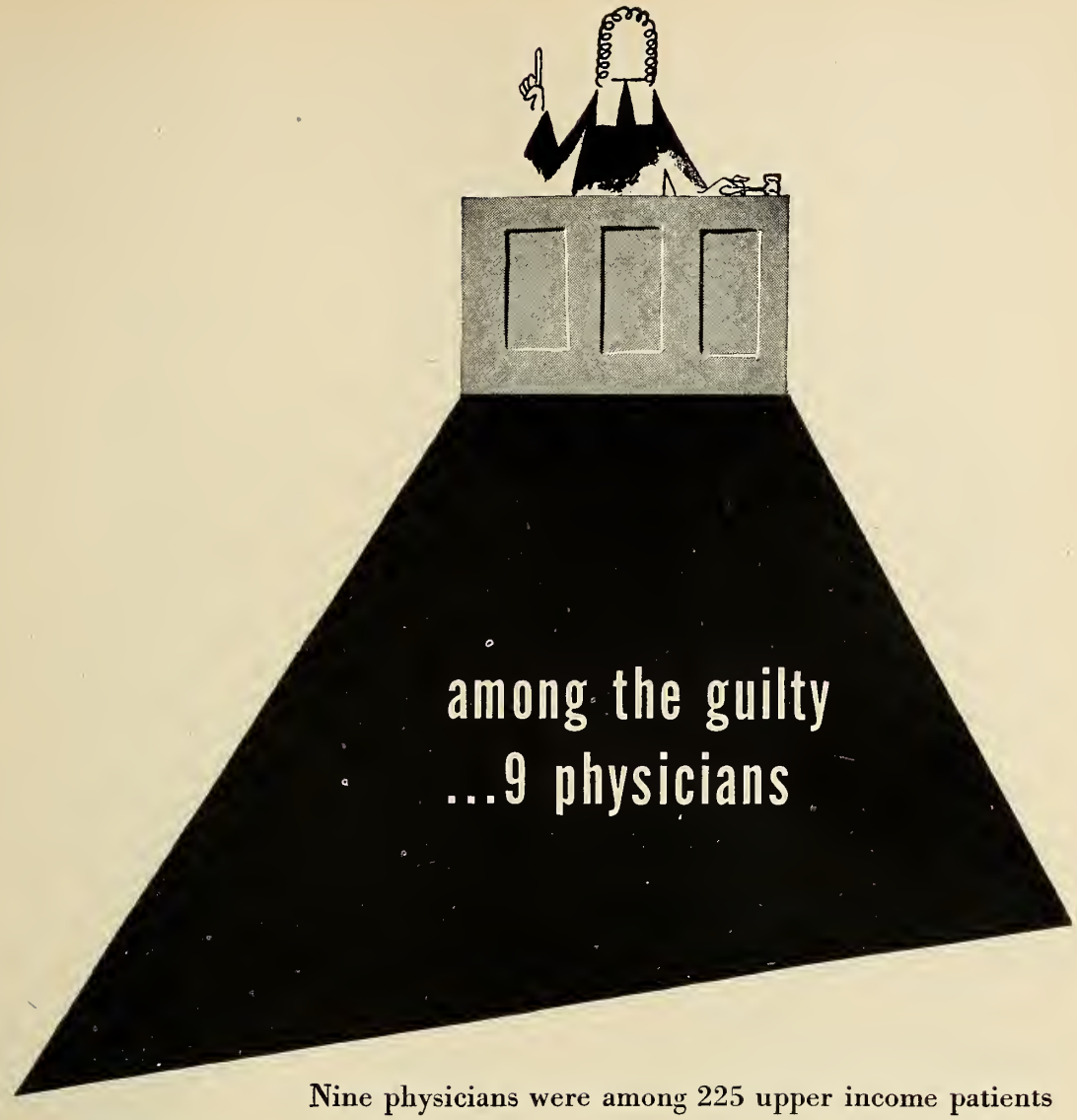
Society Activities

During 1945, officer contact with the 55 County units was considerably restricted. Nevertheless, practically every society was contacted personally by its councilor or some one of the administrative personnel.

Dissemination of society activity news was maintained throughout the year by the issuance of Secretary letters. Beginning in 1945 the monthly Secretary's Letter was sent not only to Presidents, Secretaries, and Editors of County Medical Societies but also to all members of the MSMS House of Delegates and of The Council. Eight of these were sent during the past year, and three went to every member of the Society.

With a cessation of hostilities on the war fronts in 1945, there has been a steady return of medical veterans

(Continued on Page 374)



Nine physicians were among 225 upper income patients found guilty of diets wanting in one or more vitamins. Low-vitamin diets are not restricted by income or by intelligence.[2] Greater assurance of adequate vitamin maintenance is available in potent, easy to take, and reasonably priced Upjohn vitamin preparations.

1. New England J. Med. 228:118 (Jan. 28) 1943.
2. J. A.M.A. 129:613 (Oct. 27) 1945.

Upjohn
KALAMAZOO 99, MICHIGAN

FINE PHARMACEUTICALS SINCE 1886

UPJOHN VITAMINS

SECRETARY'S ANNUAL REPORT

(Continued from Page 370)

to their civilian practices. We record with pride the honor roll of 2,287 Michigan doctors of medicine serving with the armed forces. With equal joy we now record the return of many of these same physicians.

The State Society has been untiring in its efforts to aid in the solution of the many problems confronting our returning medical colleagues. Every aid has been given especially in matters of location and postgraduate and review courses. Latest reports from the Committee on Postgraduate Medical Education indicates the popularity of provided courses for Medical Veterans is taxing to the limit the teaching facilities of our two medical colleges.

All of the administrative and organizational units of the State Society have worked zealously during 1945 to develop plans and devices to aid in the solution of the inevitable postwar economic and social problems of the medical profession. In their efforts they have been generously supported by the House of Delegates which provided adequate funds for the development of a modern Public Relations program.

It would be too time-consuming to attempt to describe in detail the many progressive activities that have been initiated by your Soicety in the short space of a few years. Your State Society has acquired a national reputation for the development of original and progressive programs in the field of scientific medicine and socio-economics.

Your attention is respectifully invited to a list of what has come to be known as "Michigan Firsts"—fourteen in number as follows:

1. Established Michigan Medical Service—the first professionally sponsored voluntary Medical Care plan. Now with nearly 1,000,000 subscribers the largest in the world.

2. Developed a Uniform Fee Schedule for Governmental Agencies thereby establishing a minimal intrinsic value of medical services.

3. Contracted with The Veterans Administration to render home-office medical care to Veterans in their home communities by their own family doctor. The contract utilized the Uniform Fee Schedule for Governmental Agencies and the services of Michigan Medical Service. It was the first statewide plan approved by the Veterans Administration.

4. Provided postgraduate education for doctors in their home communities by a unique plan of extra-mural courses.

5. Created the Michigan Foundation for Medical and Health Education—contributions to which now approximate $100,000.00.

6. Instituted an annual Industrial Health Conference. A conference designed to bring to industrial surgeons and medical men in general the latest advances in Industrial Health and to develop a better understanding between the general practitioner and the specialist in Industrial Medicine and Surgery.

7. Established a Michigan Rheumatic Fever Control program with nine diagnostic and consultation centers throughout the State. The first of such to be controlled and operated by a State Medical Society and practicing physicians.

8. Provided Cancer Control Clinics and published an outstanding "Cancer Manual" through the efforts of the Cancer Control Committee.

9. Organized the Michigan Health Council in cooperation with the Michigan Hospital Association, the Michigan Medical Service and the Michigan Hospital Service.

10. Pioneered in the development of a commercial radio program by a State Medical Society and to date has provided four series of weekly presentations on a paid basis.

11. Inaugurated a conference of State Medical Society Presidents. The original gathering of seventeen Presidents in Detroit in April, 1945, culminated in the formation of a permanent organization in December, 1945, with representation from forty-two State Medical Societies. Our own immediate Past-President, Dr. A. S. Brunk, who conceived the idea, is serving as President of the organization.

12. Developed an "Outline" for needed medical legislation by a Drafting Committee on Legislation, for submission to governmental agencies by and through State Medical Societies and the A.M.A. Council on Medical Service and Public Relations.

13. Stimulated activity for the creation of a "National Health Congress" to co-ordinate and encourage efforts along socio-economic lines by state medical societies, state dental societies, state or district hospital associations, state or district pharmaceutical associations, and the other groups interested in maintenance of the voluntary type of medical service.

14. Created a Medical Veterans Readjustment Program to aid the returning veterans in matters of postgraduate education and relocation.

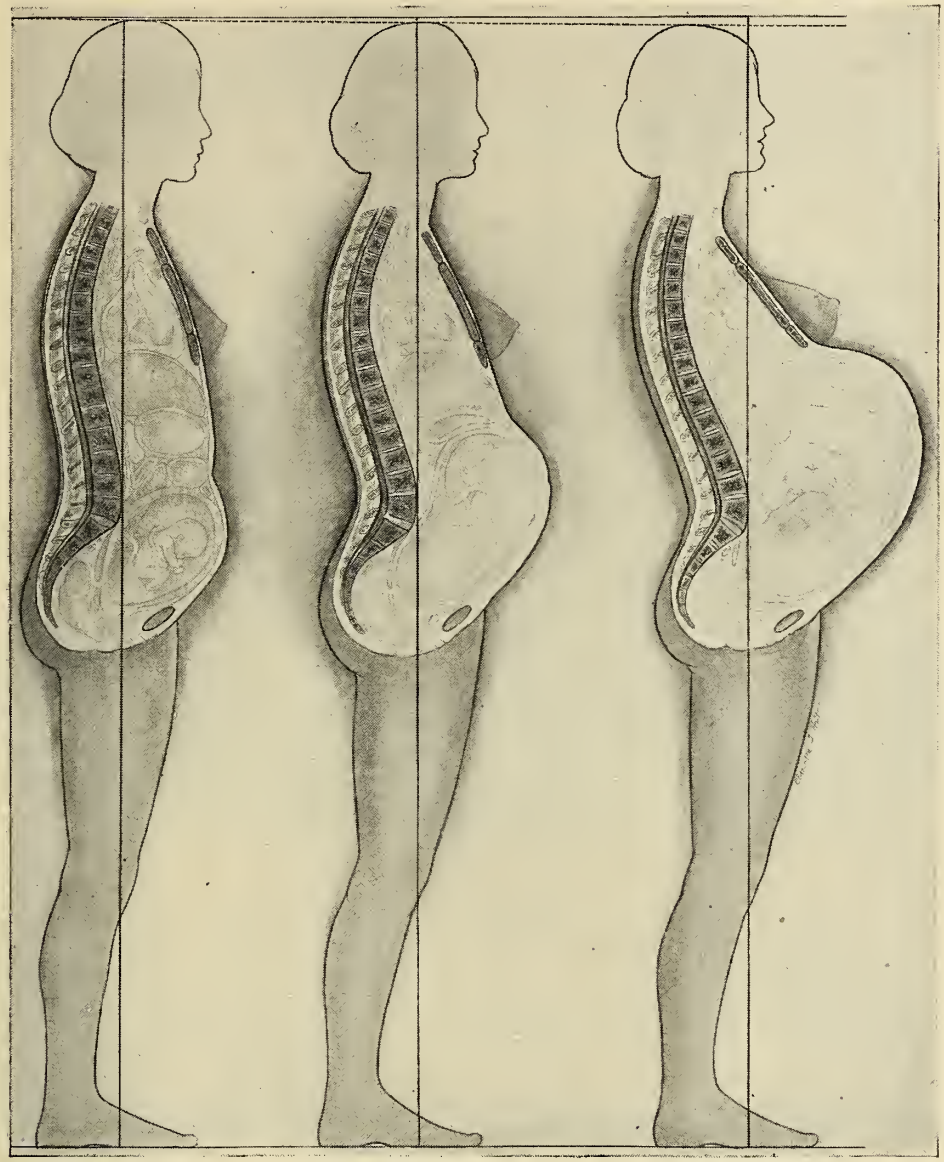
Your State Society's activities especially in the field of socio-enconomics has attracted, as would be expected, national attention. This attention has come not only from other State Societies, but from agencies of government at the national level. Since the parent organization of the medical profession, the American Medical Association, insists on maintaining the status of a Scientific and Educational organization, it is apparent that such a status precludes any participation in the field of medical economics. Obviously there should be some potent organization that can and will assert a practical influence in matters of medical economics on a national basis. The recent contacts made with your State Society by several important Federal groups indicates that the society has a recognized capacity of leadership and a definite responsibility both to the physicians of Michigan and to medicine in general.

The only organization that at the present time emerges as the one capable of developing a program on socio-economics at the national level and one that has not acquired any adverse prejudices is the Conference of Presidents and other Officers of State Medical Associations. This is an organization of your own conception and one which can function throughout the country. In

(Continued on Page 376)

BODY MECHANICS OF PREGNANCY

• STUDIES FROM LIFE MODELS DURING PREGNANCY • *Illustration by Charlotte S. Holt*



4 LUNAR MONTHS *7 LUNAR MONTHS* *10 LUNAR MONTHS*



The postural changes during pregnancy are due to the compensatory backward shift of the center of gravity caused by forward pull of the load of the pregnant uterus.

Note the retracted shoulders, carriage of head (pride of pregnancy), and the accentuation of the natural lumbar lordosis which relieves abnormal tension on back and leg muscles.

Camp Supports aid in reducing this forward traction and assist the mother in maintaining better balance.

CAMP

S. H. CAMP & COMPANY

World's Largest Manufacturers of Scientific Supports

Jackson, Michigan • *Offices in* Chicago • New York • Windsor, Ontario • London, England

SECRETARY'S ANNUAL REPORT

(Continued from Page 374)

view of these facts, I respectfully submit the following recommendations:

Recommendations

Recommendation: That the Michigan State Medical Society give practical and concrete support to the Conference of Presidents and other Officers of State Medical Associations to the end that it will develop activity in behalf of organized medicine at the national level. Such support will undobtedly enlist similar support from other state societies who need only encouragement and leadership.

Recommendation: In view of the fact that the recently signed contract with the Veterans Bureau for home-office care of veterans may occasion various problems related to that care, and realizing that similar problems may arise in the care of other governmental categories affected by the Uniform Fee Schedule, I further recommend that—The Council consider the appointment of a General Board of Control of Doctors of Medicine to aid the proper interpretation and execution of the Uniform Fee Schedule, this to be augmented by the further establishment of Boards of Control at the county levels.

Your Secretary wishes to express to The Council his sincere appreciation of its splendid co-operation and encouragement and to the committees of the State Society for their vigorous efforts to preserve and enlarge the scientific and economic activities of the society, a hearty commendation.

Mr. Burns and the Executive office personnel have been most untiring in the discharge of their many duties. For their loyal service and co-operation, your Secretary is most grateful.

TREASURER'S ANNUAL REPORT, 1945.

By A. S. Brunk, M.D., Detroit

Market value of bonds in General Account	$14,622.50
United States Savings Bonds carried at maturity value	36,100.00
Total	$50,722.50

In February, 1945, Michigan Medical Service repaid a loan of $17,544.45 to the Michigan State Medical Society. It was decided to purchase United States War Savings Bonds Series G. The purchasing price of these bonds was $17,600 the difference of $55.55 was paid out of the Treaurer's General Fund.

On October 1, the Consolidated Oil Corporation Bond was called for payment at 102. It was felt the best investment at this particular time was United States Savings Bonds. The Executive Committee of The Council approved of this action in October and $1,000 was invested in Government Savings Bonds.

CASH ACCOUNT

General Fund

Balance on hand General Fund, January 1, 1945		$ 418.50
Deposited in Michigan National Bank during 1945		1,936.17
		2,354.67
Withdrawals during 1945		1,055.55
Balance on hand January 16, 1946, in Michigan National Bank		$ 1,299.12

Bonds in General Fund

	Bonds	Interest Rate	Date Due	Quoted Market Price Jan. 16, 1946
1. 2 M	Canadian Pacific Railroad	4	Perpetual	$ 2,240.00
2 M	New York Central Railroad	4	1998	1,960.00
2 M	Detroit Edison Company	3½	1966	2,160.00
1 M	Union Pacific Railroad	3½	1970	1,060.00
1 M	United Light and Power	5½	1959	1,050.00
1 M	Grand Rapids Affiliated	5	1955	910.00
1 M	Southern Pacific Railroad	4½	1977	1,050.00
				10,430.00
	Government Savings Bonds carried at full value			36,100.00
				$46,530.00
II.	The following bonds have been called and are no longer interest bearing.			
1 M	Consumers Power Company @ 105¼			1,052.50
1 M	Government of Dominion of Canada @ 104			1,040.00
2 M	American Telephone and Telegraph @ 105			2,100.00
	Total bonds			$50,722.50
	Total cash			1,299.12
	Total amount in Treasurer's account			$52,021.62

EDITOR'S ANNUAL REPORT, 1945

By Wilfrid Haughey, M.D., Battle Creek

The Journal of the Michigan State Medical Society has been published regularly during the year 1945, but has been appearing late most of the time. It has been much larger than before, 1,428 pages excluding the four pages of cover each month, and twenty pages of insert in tint in the December number, giving the papers and report of the Presidents' Conference in Chicago, December 2, 1945. The principle cause for tardiness of The Journal was its increased size, and the large increase in advertising pages, expecially those in color. There have had to be about two and half times the press work on The Journal as would be the case in The Journal as it appeared two or three years ago.

Advertising

The industrial and financial conditions have increased the availability of colored advertising, and in fact of all advertising, and we have profited by taking it. We have used the front pages for advertising, and have interspersed reading material, such as the departments of War Medicine, Political Medicine, Readjustment for Veterans, Medical Public Relations, et cetera, putting about fourteen pages of reading in amongst the advertising. This has made advertising appeal, and has brought to us much advertising that would not otherwise have been ours.

We have been severely criticized for making The Journal "a house organ," but have felt that we have given our members a good grade of interesting and instructive material, which in other journals is grouped in the text in the center of the journal. By our arrangement we have enticed much advertising.

Advertising Policy

While on the subject of advertising we have expanded our plan of accepting advertisements that have not been Council rejected, that are in common use, and that have a local appeal. We have tried in our selections to use only preparations put up by reputable houses, those whose contents seem proper, and those whose advertising is first quality. By this stand we have been able to use many products that would have been rejected had we awaited Council approval. Our advertisements are sent to the Publication Committee and are approved by them by mail before being used.

Original Articles

During the year we have published fifty-eight original articles. They have been of all sizes as to length, but have averaged longer than in the past years. Owing to our meeting having been omitted this year we have had a dearth of articles. We have had sufficient, but

(Continued on Page 380)

Announcing...

A *THERAPEUTIC* FORMULA FOR VITAMIN DEFICIENCIES

HYPERVITAM

A THERAPEUTIC VITAMIN FORMULA

Daily dose of 3 CAPSULES contains:

Vitamin A	30,000 U.S.P. Units
Thiamine (B_1)	30 mg.
Riboflavin (B_2)	15 mg.
Niacinamide	150 mg.
Pyridoxine (B_6)	3 mg.
Calcium Pantothenate	15 mg.
Ascorbic Acid (C)	300 mg.
Vitamin D	3,000 U.S.P. Units
Alpha Tocopherol (E)	30 mg.

HYPERVITAM* embodies 2 basic principles in the therapy of vitamin deficiencies:

1. MORE COMPLETE FORMULA—vitamin deficiency symptoms are almost always multiple, rarely single.
2. EXCEPTIONALLY HIGH POTENCIES—vitamin deficiency diseases should be treated with *intensive* dosage . . . in divided doses for maintaining more uniform blood levels.

U. S. VITAMIN CORPORATION *pioneers again!*

1936—with multiple vitamin-mineral diet supplement—VI-SYNERAL

1940—with injectable preparation of Vitamin B complex factors—POLY-B SPECIAL

1943—with aqueous preparation combining fat- and water-soluble vitamins—VI-SYNERAL VITAMIN DROPS

1945—with therapeutic vitamin formula—HYPERVITAM

*Trade Mark Reg. U S. Pat. Off.

Available in soft gelatin oval capsules, in bottles of 30, 90 and 500

PROFESSIONAL SAMPLES AND LITERATURE AVAILABLE

U. S. VITAMIN CORPORATION, NEW YORK 17, N. Y.

Precision Assures Quality and Protects Vision

Spectacle lenses may appear to be just tiny bits of glass. But their value to those who need them cannot be measured. A lens placed before an eye becomes a part of the human visual mechanism. Its quality and precision, therefore, must be unquestionable.

At the Cummins laboratories every resource of optical science is employed to assure the finest quality glasses.

CUMMINS OPTICAL COMPANY

CAdillac 7344 **76 W. Adams**

4th Floor Kales Building

(Facing Grand Circus Park)

DETROIT 26, MICHIGAN

OFFICE HOURS:

DAILY 9 TO 5—MONDAYS TO 7 P. M.

EDITOR'S ANNUAL REPORT

(Continued from Page 376)

do not have many on hand. In most instances we have published the picture of the author. We have discontinued the abstract of the paper at its heading.

Editorials, Et Cetera

Sixty-four editorials have been prepared and published this year. Most of them have been on economic or sociological subjects as they relate to medicine and its future. We pride ourselves that we have foreseen and called atention to several trends in medicine that have allowed the Michigan State Medical Society to be way out in front on topics now demanding the attention of the profession: service for the veterans in their homes has been accomplished: a minimum fee schedule for Governmental agencies: a proposed set of principles upon which a national health measure could be built. We have tried to carry out the instructions of the House of Delegates and interpret their actions to the membership.

Doctor's Library

Sixty-six books have been reviewed in our Doctor's Library department. This is less than last year, by almost one-half, but the publication of new books, and new editions has been much curtailed during the war, and especially during the past year. We have tried to make these reviews short but descriptive of our impressions of the book. We have tried to make this department a guide which one could follow in his purchases. There were seventy-one deaths recorded, including eleven in the Military service.

The Journal

The financial report shows THE JOURNAL in the black. We are proud of THE JOURNAL and its record of service.

TRUSTEE'S ANNUAL REPORT, 1945

By Wm. A. Hyland, M.D., Grand Rapids

BONDS IN TRUSTEE FUND

Bonds	*Interest Rate*	*Date Due*	*Quoted Market Price Jan. 16, 1946*
2 M New England Gas & Elec...	5	1950	$ 1,980.00
1 M Southern Pacific Railroad	4½	1977	1,050.00
1 M Grand Rapids Affiliated....	5	1955	910.00
			$ 3,940.00

Cash Account

Balance on hand January 1, 1945....	$724.40
Collected in interest from January 1, 1945, to January 1, 1946.....	195.00
Balance on hand in Michigan National Bank.....	$919.40

ANNUAL COUNTY SECRETARIES CONFERENCE

(Continued from Page 294)

Detroit; John W. Castellucci, Detroit; Gordon Davis, Detroit; Carleton Dean, M.D., Lansing; J. S. DeTar, M.D. Milan; Clarke Dorland, M.D., Lapeer; W. G. Elliott, M.D., Detroit; Rev. John L. Ernst, Detroit; L. Gordon Goodrich, Detroit; R. S. Hainer, Detroit; L. T. Henderson, M.D., Detroit; Henry S. Hosmer, Detroit; Hardy A. Kemp, M.D., Detroit; Jay C. Ketchum, Detroit; David Kliger, M.D., Detroit; Harry Lipson, Detroit; W. G. MacKersie, M.D., Detroit; J. R. McBride, M.D., Lapeer; G. L. McClellan, M.D., Detroit; Martha E. McCrary, Lansing; H. A. Miller, M.D., Lansing; Robert M. Morse, Lansing; R. L. Novy, M.D., Detroit; D. J. O'Brien, M.D., Lapeer; Capt. L. A. Potter, Lansing; Major M. J. Schlussel, M.C., Detroit; C. E. Simpson, M.D., Detroit; A. M. Smith, Detroit; E. J. Steinberger, M.D., Detroit; E. C. Texter, M.D., Detroit; B. H. VanLeuven, M.D., Lansing; John E. Verbiest, Detroit; Roger V. Walker, M.D., Detroit; Arch Walls, M.D., Detroit; Carl G. Wencke, M.D., Battle Creek, and G. H. Wood, M.D., Onaway.



Our Part in the Health of Your Patients

Fine prescription work means fresh laboratory-controlled ingredients, step-by-step checking of all compounding, an understanding attitude toward the doctor's patient. Prices must be based on cost, plus a fair profit. This all is the basis of Sams fine prescription compounding practice. This is our part in the health and happiness of your patient.

PRESCRIPTION LABORATORIES

SAMS DRUG DEPARTMENT, INC.

Two Stores • 1056 Randolph • 13 Campus Martius • Detroit 26, Mich.

We Welcome Prescriptions by Mail For Hard-To-Get Items

Michigan State Medical Society

BUDGETS, 1946

Adopted by The Council in Annual Session

January 19, 1946

GENERAL FUND

INCOME		
3,200 Members at $12 (dues)		$38,400.00
Less Allocation to JOURNAL ($1.50)		4,800.00
		$33,600
Interest		1,100.00
Miscellaneous		100.00
TOTAL INCOME		$34,800.00
FROM RESERVES		14,420.00
		$49,220.00
APPROPRIATIONS		
Administrative and General		
Administrative Salaries	$ 7,500.00	
Salaries: Office-regular and extra	7,200.00	
General Counsel	2,500.00	
General Counsel Expense	1,000.00	
Office Rent and Light	1,360.00	
Printing, Stationery, Supplies	800.00	
Postage	800.00	
Insurance and Fidelity Bonds	1,650.00	
Auditing	850.00	
New Equipment and Repairs	350.00	
Telephone and Telegraph	1,500.00	
Michigan Sales Tax	100.00	
Payroll Taxes	175.00	
Unemployment Compensation Insurance	785.00	
Miscellaneous General Expense	100.00	
	$26,670.00	
Less Expenses Redistributed to JOURNAL	1,800.00	
TOTAL ADMINISTRATIVE AND GENERAL		$24,870.00
Society Activities		
Council Expense	$ 5,000.00	
Delegates to AMA	2,500.00	
County Secretary Conference	400.00	
General Society Travel Expense	1,750.00	
Officer's Travel	1,750.00	
Secretary's Letter	500.00	
Publication Expense	50.00	
Legal Expense	6,000.00	
Woman's Auxiliary—Annual Meeting	200.00	
Sundry Society Expenses	400.00	
TOTAL SOCIETY EXPENSE		$18,550.00
Committee Expenses		
Legislative	200.00	
Distribution of Medical Care	50.00	
Postgraduate Medical Education	3,500.00	
Preventive Medicine	50.00	
Cancer	500.00	
Child Welfare	50.00	
Iodized Salt	50.00	
Heart and Degenerative Diseases	50.00	
Industrial Health and Clinic	400.00	
Maternal Health	50.00	
Mental Hygiene	50.00	
Scientific Radio	50.00	
Venereal Disease Control	50.00	
Tuberculosis Control	50.00	
Ethics	50.00	
Scientific Work	50.00	
P. and A. S. for M.D.s	50.00	
Prelicensure Medical Education	50.00	
Sundry Other Committees	500.00	
TOTAL COMMITTEE EXPENSE	$ 5,800.00	
GRAND TOTAL		$49,220.00

THE JOURNAL, 1946

INCOME		
Subscriptions from members	$ 4,800.00	
Other subscriptions	100.00	
Advertising Sales	30,600.00	
Reprint Sales	1,000.00	
JOURNAL Cuts	75.00	
TOTAL JOURNAL INCOME		$36,575.00
EXPENSES		
Salaries	$10,440.00	
Editor's Expense	1,200.00	
Printing and Mailing	16,000.00	
Reprint and Cut Expense	900.00	
Discounts and Commissions on advertising sales	5,335.00	
Allocation of Administration and General Office Exp.	1,800.00	
Postage	400.00	
Miscellaneous	500.00	
TOTAL JOURNAL EXPENSE		$36,575.00

RHEUMATIC FEVER CONTROL
(For 10 months of 1946)

INCOME		
Michigan Crippled Children Society Grant		$15,000.00
EXPENSES		
Headquarters Expense		
Secretarial	$ 1,120.00	
Stationery and Supplies	80.00	
Postage	50.00	
Equipment	250.00	
TOTAL	$ 1,500.00	
Expense for 9 Centers, as above ($1,500x9)	13,500.00	
GRAND TOTAL		$15,000.00

MSMS ANNUAL SESSION, 1946

INCOME		
Booth Sales		$11,300.00
EXPENSES		
Cost of Session	6,985.00	
Salaries	4,140.00	
Reporting Annual Session	175.00	
	$11,300.00	

PUBLIC EDUCATION ACCOUNT, 1946

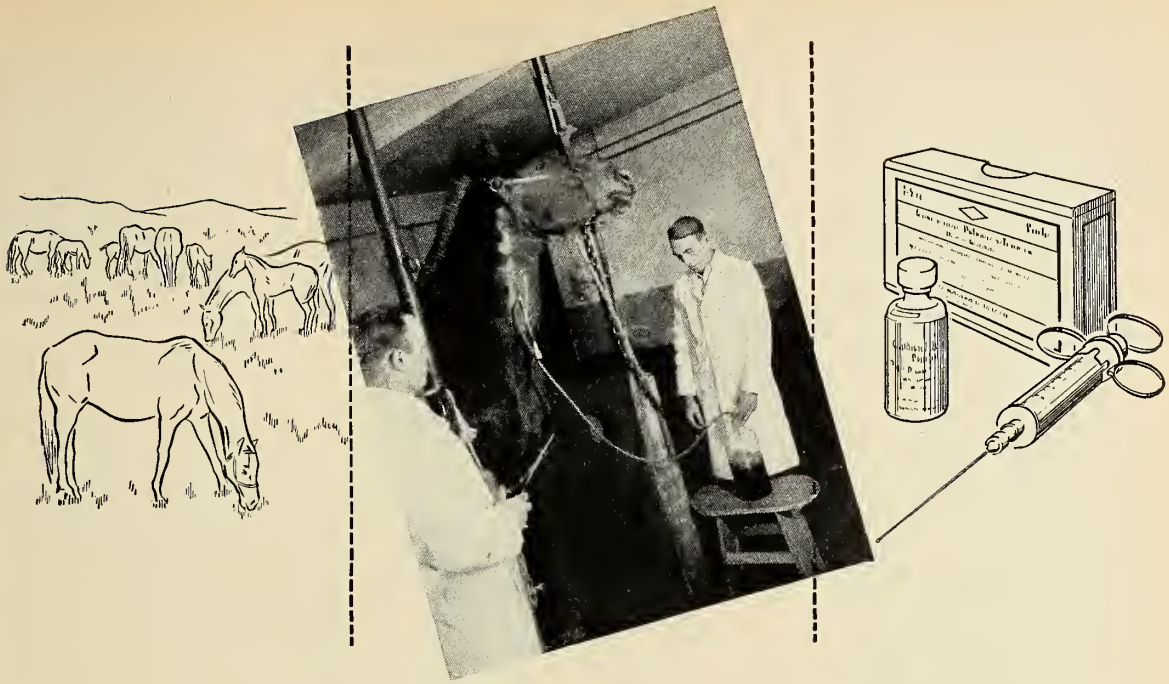
Balance December 28, 1945		$12,150.00
INCOME IN 1946		
3,200 Members at $25.00	80,000.00	
	$92,150.00	
EXPENSES		
Salaries	$ 7,000.00	
Office Rent and Light	864.00	
Printing, Stationery and Supplies	1,200.00	
Postage	1,300.00	
Office Equipment	500.00	
Travel Expense	2,000.00	
School of Information (1/20/46)	2,000.00	
Purchase of Pamphlets	2,500.00	
Michigan Health Council	5,000.00	
Public Relations Program:		
Commercial Radio and publicity	27,000.00	
Secondary School Health Education	1,000.00	
Public Relations Conference (2/21/46)	1,000.00	
Newspaper and other media	2,000.00	
Conference of Presidents	5,000.00	
National Conference on Medical Service	500.00	
Special Meetings	500.00	
Miscellaneous	500.00	
Reserve	32,286.00	
TOTAL EXPENSE		$92,150

REPORT OF ERNST & ERNST, 1945

We have examined the balance sheet of the Michigan State Medical Society as of December 28, 1945, and the statements of income and expense and surplus for the period from December 30, 1944, to December 28, 1945, have reviewed the system of internal control and the accounting procedures of the Society and, without making a detailed audit of the transactions, have examined or tested accounting records of the Society and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

The Society was organized on September 17, 1910, under the laws of the State of Michigan as a corporation not for pecuniary profit. The charter was extended on November 10, 1941, for a period of thirty years from September 17, 1940. The Society is affiliated with the American Medical Association and it charters county medical societies within the State of Michigan. The purposes of the Society are the promotion of the science and art of medicine, the protection of the public health, and the betterment of the medical profession. In the furtherance of these purposes the Society publishes "The Journal of the Michigan State Medical Society."

(Continued on Page 386)



"NOT HOW MUCH... BUT HOW WELL"

U. S. STANDARD PRODUCTS CO.

BIOLOGICALS

AMPULS AND STERILE SOLUTIONS FOR PARENTERAL ADMINISTRATION

An ideal location in a small rural community favors concentration on the important work in which we specialize—

Patented processes confer distinct therapeutic advantages—

Methods and thinking based upon the advanced frontiers of progress—

—These are factors contributing to the established acceptance of U. S. Standard Products by those of the medical profession who have come to regard them as essential.

U. S. Standard Products are now available at leading pharmacies throughout most of the United States. May we send you detailed information?

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SMALLPOX VACCINE
TETANUS ANTITOXIN
TYPHOID VACCINE

Also a representative list of glandular products and pharmaceuticals.

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.

(Continued from Page 382)

Balance Sheet

The balance sheet at December 28, 1945, is summarized as follows:

Assets Dec. 28, 1945	
Cash	$ 42,808.76
Accounts receivable, less reserve	4,632.36
Securities—at cost	52,457.20
Postgraduate Medical Education Foundation	23,400.86
Deferred charge	.00
	$123,299.18
Liabilities	
Accounts payable	$ 11,384.05
Unearned income	14,904.00
Postgraduate Medical Education Foundation—Contra	23,400.86
Reserves	12,150.00
Surplus	16,460.27
	$123,299.18

Income and Expense Statement

A summary of the income and expense statement for the period from December 30, 1944, to December 28, 1945, is presented as follows:

Income		
Membership fees		$35,589.86
Income from The Journal		7,695.21
Interest received		1,727.90
Miscellaneous		17,544.45
Total Income		$62,557.42
Expenses		
Administrative and general		$23,883.47
Society activities		14,008.32
Committee expenses		6,764.74
Total Expenses		$44,656.53
Excess of Income Over Expenses		$17,900.89
Other deductions		43.75
Net Income		$17,857.14

Accounts receivable for advertising were analyzed as to month of charge and are shown as follows:

Month of Charge	December 28, 1945 Amount	Per Cent
October, November, and December	$3,951.12	86.26%
July, August, and September	324.97	7.09%
January to June, inclusive	241.99	5.29%
Prior to January 1st	62.28	1.36%
Total	$4,580.36	100.00%

Our examination of accounts receivable as of December 28, 1945, included tests of the balances by communication with selected debtors. It is our opinion that the reserve of $100.00 is sufficient for losses anticipated in collection of the accounts.

Securities

The changes in securities during the year were as follows:

Balance at December 30, 1944		$47,092.28
Additions		
United States Savings Bonds purchased from Michigan National Bank at issue price:		
Series G, 2½%, maturing February 1, 1957	$22,600.00	
Series G, 2½%, maturing June 1, 1957	5,000.00	
Series G, 2½%, maturing December 1, 1957	1,000.00	
Increase in redemption value of United States Savings Bonds acquired in prior years	392.70	28,992.70
		$76,084.98
Deductions		
Securities called for redemption and surrendered for cash during the year:		
Consumers Power Company, 3¼%, maturing November 1, 1966	$ 1,020.00	
Consolidated Oil Corporation, 3½%, maturing June 1, 1951	1,063.75	2,083.75
Balance at December 28, 1945		$74,001.23
Represented by:		
Securities held by the Society		$52,457.20
Securities held by the trustee for the Postgraduate Medical Education Foundation		21,544.03
Balance at December 28, 1945		$74,001.23

Securities owned at December 28, 1945, have been stated at cost. We inspected the securities held by the Society. The securties held by the Michigan National Bank, trustee for the Postgraduate Medical Education Foundation, were confirmed to us by the trustee. We accounted for the income from all securities for the period. At December 28, 1945, aggregate market prices of securities held by the Society were $1,155.05 in excess of cost, and the aggregate market prices of securities held by the trustee for the Postgraduate Medical Education Foundation were $114.41 in excess of cost. Details of the securities are shown in a schedule in this report.

Michigan Foundation for Medical and Health Education

The assets held by the trustee for the Postgraduate Medical Education Foundation at December 28, 1945, are shown separately in the balance sheet and the unexpended balance of the trust funds is shown under a separate caption in the liability section. A non-profit corporation, sponsored by the Society, was organized during the period under Michigan laws as the Michigan Foundation for Medical and Health Education, Inc., for the purpose of carrying out a broad educational program relating to medical and health matters. The activities of this new organization will encompass the work of the Postgraduate Medical Education Foundation. During the period under review, the Executive Committee of the Council of the Society ordered the diversion to this new corporation of certain potential cash receipts of the Society which would have been deposited with the trustee for the Postgraduate Medical Education Foundation. The Executive Committee also authorized the trustee to transfer the assets held by it to the Michigan Foundation for Medical and Health Education, Inc. At December 28, 1945, the details of this transfer had not been completed. Our examination was restricted to the accounts of Michigan State Medical Society, and we have made no examination of records of the Michigan Foundation for Medical and Health Education, Inc.

During the period covered by our examination the Society received $17,544.45 from Michigan Medical Service representing payment of organizational expenditures made by Michigan State Medical Society. A full reserve had been provided therefor in prior years and the entire amount has been included as income in the income and expense statement for the period from December 30, 1944, to December 28, 1945.

Dues of Military Members Waived

The Society has continued its policy of waiving payment of dues of members in military or naval service and, in the event the dues were paid for the year of induction, to allow free membership for a designated period following discharge. The provision made in prior years for the deferment of income received from such members is sufficient to provide those now in the services, or recently discharged, who entered service as currently paid-up members of the Society.

A statement of the income and expenses of the Public Education program conducted by the Society is included in this report. The unexpended balance of the funds assessed for this purpose has been reflected in a reserve in the accompanying balance sheet.

$16,871 Returned to County Medical Societies

On November 8, 1945, the Executive Committee of the Council authorized the return to the various county societies of the special assessment of $5.00 per capita authorized previously for the purpose of financing a medical veterans' readjustment program. At December 28, 1945, $16,871.25, representing all receipts during the period from this assessment, had been returned.

(Continued on Page 388)



Bridge the "nutritional gap"

The nutritional benefits of milk need not be deprived the "milk-sensitive" patient, even though successful treatment demands complete elimination of the offending food from the diet.

Clinical evidence has established MULL-SOY as an effective hypoallergenic substitute for cow's milk. This concentrated, emulsified soy bean food—homogenized and sterilized—closely approximates cow's milk in protein, fat, carbohydrate and mineral content. It is palatable, well tolerated, easy to digest and easy to prepare. Infants (particularly) thrive on MULL-SOY, and take it readily.

Write for copies of "Tasty Recipes for Mull-Soy in Milk-Free Diets", for your milk-allergic patients.

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MULL-SOY

HYPOALLERGENIC SOY BEAN FOOD

ACCEPTED AMERICAN MEDICAL ASS'N. Council and Formerly

MULL-SOY is a liquid emulsified food prepared from water, soy bean flour, soy bean oil, dextrose, sucrose, calcium phosphate, calcium carbonate, salt and soy bean lecithin, homogenized and sterilized. Available in 15½ fl. oz. cans at all drug stores.

BALANCE SHEET—December 28, 1945

ASSETS

Cash		
Demand deposits	$ 9,231.16	
Cash for deposit	319.46	
Office cash fund	5.27	
Savings deposits	33,252.87	
		$ 42,808.76
Accounts Receivable		
For advertising	$ 4,580.36	
For space at annual session	108.00	
For dues	44.00	
	$ 4,732.36	
Less reserve	100.00	
		4,632.36
Securities		
Bonds—at cost		52,457.20
Postgraduate Medical Education Foundation		
Note A		
Bonds—at cost	$21,544.03	
Cash	1,856.83	
		23,400.86
		$123,299.18

LIABILITIES

Accounts Payable		
For current expenses, etc.	$11,061.05	
Exhibitors' duplicate payments	259.50	
Payroll taxes	63.50	
		$ 11,384.05
Unearned Income		
Dues for the year 1946	$ 444.00	
Space sales for 1946 annual session	360.00	
Dues of military members applicable to a future year	14,100.00	
		14,904.00
Postgraduate Medical Education Foundation		
Unexpended balance of trust funds		23,400.86
Reserve		
For Public Education Program		12,150.00
Surplus		
Balance at December 30, 1944	$43,603.13	
Net income for the period from December 30, 1944, to December 28, 1945	17,857.14	
		61,460.27
		$123,299.18

INCOME AND EXPENSE STATEMENT
From December 30, 1944, to December 28, 1945

Income:		
Membership fees	$40,674.00	
Less portion allocated to income of *The Journal* for subscriptions	5,084.14	
		$35,589.86
Income from The Journal		7,695.21
Interest:		
On securities	$ 1,371.87	
On savings deposits and time certificates of deposit	356.03	
		1,727.90
Recovery of funds advanced to Michigan Medical Service charged off in a prior year		17,544.45
Total Income		$62,557.42
Expenses:		
Administrative and general	$23,883.47	
Society activities	14,008.32	
Committee expenses	6,764.74	
		44,656.53
Excess of Income Over Expenses		$17,900.89
Other Deduction:		
Loss on sale of bond		43.75
Net Income		$17,857.14

RECEIPTS AND DISBURSEMENTS OF POSTGRADUATE MEDICAL EDUCATION FOUNDATION
From December 30, 1944, to December 28, 1945

Balance at December 30, 1944		$18,210.56
Receipts:		
Contributions Received:		
From Estate of Andrew P. Biddle, M.D.	$4,622.90	
From anonymous donor	100.00	
		4,722.90
Interest on securities		542.50
Profit on sale of bond		32.50
		$23,508.46
Disbursements:		
Trustee's fees to December 15, 1945	$ 107.35	
Postage on bond sold	.25	
		107.60
Balance at December 28, 1945		$23,400.86

INCOME AND EXPENSE OF PUBLIC EDUCATION PROGRAM
From December 30, 1944, to December 28, 1945

Reserve balance at December 30, 1944		$13,363.77
Income:		
From assessment of the membership		33,875.00
		$47,238.77
Expenses:		
School of Information	$ 2,515.93	
Purchase of pamphlets	386.74	
Michigan Health Council	5,000.00	
Radio and newspaper programs	25,923.44	
Publicizing radio and newspaper programs	1,168.00	
Miscellaneous	94.66	$35,088.77
Reserve Balance at December 28, 1945		$12,150.00

(Continued on Page 390)

CASTLE'S NEW No. 46 LIGHT



Gives So Much For So Little!

Light where you want it . . . as easy as painting your finger

•

The Castle No. 46 is the most flexible light of its type ever offered. The long offset arm permits centering the light directly over the table. The easy adjustability of the counterbalanced upright gives effortless up and down adjustment from 48 to 75 inches. *No manual locking device.* **The lamp head is completely flexible and the universal joint allows tilting or rotating to any position. Finished in gleaming, easy-to-clean, cream white enamel, with mar-proof crackle finish base.**

Write for special folder that describes this revolutionary light in detail.

MEDICAL ARTS SURGICAL SUPPLY COMPANY

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In Any Place--
At Any Time--

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Tablet—No Heating—Urine-Sugar Test



Plastic Pocket-Size Set (No. 2106). Includes all essentials for testing.

Complete information upon request. Distributed through regular drug and medical supply channels.

AMES COMPANY, Inc. ELKHART, INDIANA

INCOME FROM THE JOURNAL OF MSMS

From December 30, 1944, to December 28, 1945

INCOME:	
Subscriptions from members	$ 5,084.14
Other subscriptions	160.50
Advertising sales	39,444.56
Reprint sales	1,003.95
JOURNAL cuts	130.57
	$45,823.72
EXPENSES:	
Salaries	$ 7,200.00
Editor's expense	1,200.00
Printing and mailing	19,241.36
Cost of reprints and cuts	879.05
Discounts and commissions on advertising sales	7,408.10
Allocation of administrative and general expense	1,800.00
Postage	400.00
	$38,128.51
NET INCOME	$ 7,695.21

EXPENSES

From December 30, 1944, to December 28, 1945

ADMINISTRATIVE AND GENERAL:	
Salaries—administrative	$ 5,600.00
Salaries—office	4,640.41
General counsel	8,105.55
Office rent and light	1,443.62
Printing, stationery, and supplies	938.77
Postage	637.89
Insurance and fidelity bonds	1,633.73
Auditing and system service	820.83
Repairs	15.00
Telephone and telegraph	1,526.92
Michigan sales tax	65.25
Payroll taxes	154.43
Miscellaneous	101.07
	$25,683.47
Less expenses redistributed to JOURNAL	1,800.00
	$23,883.47
SOCIETY ACTIVITIES:	
Administrative salaries allocable to annual session expense	$ 3,585.00
Council expense	4,808.34
Delegates to American Medical Association	214.84
County Secretaries' Conference	14.10
General society travel expense	1,886.67
Officers' travel expense	1,786.53
Secretary's letters	594.73
Publication expense	62.10
Reporting annual session	313.57
Legal expense	75.00
Sundry society expense	235.47
	$13,576.35
Net revenue (expense**) of annual session	431.97**
	$14,008.32
COMMITTEE EXPENSES:	
Legislative	710.32
Distribution of medical care	..
Joint committee on health education	..
Postgraduate medical education	2,800.57
Preventive medicine	57.45
Cancer control	644.18
Child welfare	..
Iodized salt	..
Heart and degenerative diseases	15.00
Industrial health and clinic	518.55
Maternal health	26.64
Mental hygiene	..
Radio	..
Venereal disease control	53.60
Tuberculosis control	..
Public relations	42.00
Ethics	37.83
Scientific work	5.37
Procurement and assignment of doctors of medicine	79.56
Prelicensure medical examination	..
Medical veterans' readjustment program	153.80
Postgraduate subcommittee on postwar education	154.91
Medical advisory committee on rehabilitation	101.93
Postgraduate foundation	136.73
Uniform fee schedules with government agencies	595.46
Rheumatic fever and conference	520.31
Sundry other committees	110.53
	$ 6,764.74
TOTAL	$44,656.53

Opinion

In our opinion, the accompanying balance sheet and related statements of income and expense present fairly the position of Michigan State Medical Society at December 28, 1945, and its income and expenses for the period from December 30, 1944, to December 28, 1945, in conformity with the generally accepted accounting principles applied on a basis consistent with that of the preceding period.

ERNST & ERNST
Certified Public Accountants

January 12, 1946



No food (except breast milk) is more highly regarded than Similac for feeding the very young, small twins, prematures, or infants who have suffered a digestive upset. Similac is satisfactory in these special cases simply because it *resembles breast milk so closely,* and normal babies thrive on it for the same reason. This similarity to breast milk is definitely desirable — *from birth until weaning.*

A powdered modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butterfat is removed and to which has been added lactose, olive oil, cocoanut oil, corn oil, and fish liver oil concentrate.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

One level tablespoon of Similac powder added to *two* ounces of water makes *two* fluid ounces of Similac. This is the normal mixture and the caloric value is approximately 20 calories per fluid ounce.

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Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

STUDY ON FLUORINE AND DENTAL CARIES

In six Michigan towns where the water supply contains fluorine, the school children have healthier teeth than children in five towns whose water supply does not have fluorine. This study of the dental conditions of 866 children was conducted by dentists of the Michigan Department of Health.

School children in the non-fluorine areas had nearly three times as much tooth decay as children who had used flourine-containing water all their lives—an average of 5.7 decayed teeth per child against 2.2.

Towns included in the study whose water supply contains one part pjer million or more of fluorine are: Carleton, Columbiaville, Memphis, Belleville, Richmond and Fowler. In these towns 410 school children were given complete dental examinations. Towns whose water supply contains no flourine are: Edmore, Lawton, Lake Odessa, Maple Rapids and Bronson. A total of 456 school children from this group was examined.

Results of this Michigan study agree with those reported by the U. S. Public Health Service in other areas. It has been found that teeth decay less frequently among persons who, for the first eight years of life, drink water which naturally contains fluorine.

Michigan is now conducting a study to determine whether fluorine, artificially added to the water supply, will reduce the amount of tooth decay. For the past year, one part per million flourine has been added to the Grand Rapids city water supply, and a careful check is being kept on the dental conditions of school children.

USE OF PLASMA INCREASES

Use of Michigan's free blood plasma increased 40 per cent in January, according to records of the Michigan Department of Health which show that 1,402 units of plasma were distributed compared to the previous six-month average of 1,004. During January 604 patients were treated with plasma compared to 459, the average for the preceding six months.

With present equipment the laboratories can process sufficient plasma to meet this increase; the only problem is to secure sufficient blood donors.

No disaster or sudden need from one locality accounted for this jump in plasma use; it was a statewide trend. Several hospitals explained that their increased need was due to physicians returning from the armed services.

Principal uses of plasma in Michigan have been for the treatment of shock resulting from accidents, burns, surgical operations or childbirth, and for nourishing infants and premature babies.

Michigan was the first state to make blood plasma available free to any citizen needing it. The program began in September, 1943, as a joint project of the American Red Cross, which solicits blood donors, and the Michigan Department of Health which collects the blood and processes it into plasma. At present free plasma is distributed by 146 hospitals serving 76 counties. The plasma is returned to the county from which the blood is donated.

GAMMA GLOBULIN USE RISES WITH MEASLES INCIDENCE

As Michigan's 1946 epidemic of measles got under way in January, demand for gamma globulin hit an all-time high with 2,039 vials sent out from the Michigan Department of Health. During the previous six months only 1,347 vials had been requested.

In January 2,236 cases of measles were reported against 90 for January, 1945.

1945 BIRTHS AND DEATHS DECREASE

Both births and deaths in Michigan dropped slightly in 1945. There were 111,950 babies born compared to 113,681 in 1944. In 1943, record-breaking year for new babies, there were 125,441 births recorded in Michigan. This decrease in birth rate is in line with a nation-wide trend.

The 1945 death rate of 9.98 is exactly the average death rate for the previous five years in Michigan. The 1945 deaths totaled 53,650 compared to 54,000 the previous year and 56,774 for 1943.

CASES OF CERTAIN COMMUNICABLE DISEASES

	January 1946	January 1945	Seven Year median
Diphtheria	48	63	27
Gonorrhea	1,276	861	551
Lobar Pneumonia	127	109	341
Measles	2,451	90	1,384
Meningococcic meningitis	34	24	3
Pertussis	466	370	1,077
Poliomyelitis	5	1	1
Scarlet fever	543	1,056	1,031
Syphilis	1,422	1,263	909
Tuberculosis	310	418	402
Typhoid	5	3	3
Undulant Fever	6	8	8
Smallpox	0	3	1

SUMMARY OF THE EMIC PROGRAM IN MICHIGAN

From May 27, 1943, the date when the Emergency Maternity and Infant Care program was started in Michigan, to January 1, 1946, the Michigan Department of Health received 44,284 applications for maternity and pediatric care for wives and infants of servicemen in the lowest four pay grades of the armed forces, of which 38,519 were authorized for care, including medical, hospital and nursing care. At the beginning of the program a separate count was not kept of maternity and pediatric cases, but in February, 1944, the case load

(Continued on Page 412)



Pertinent Facts

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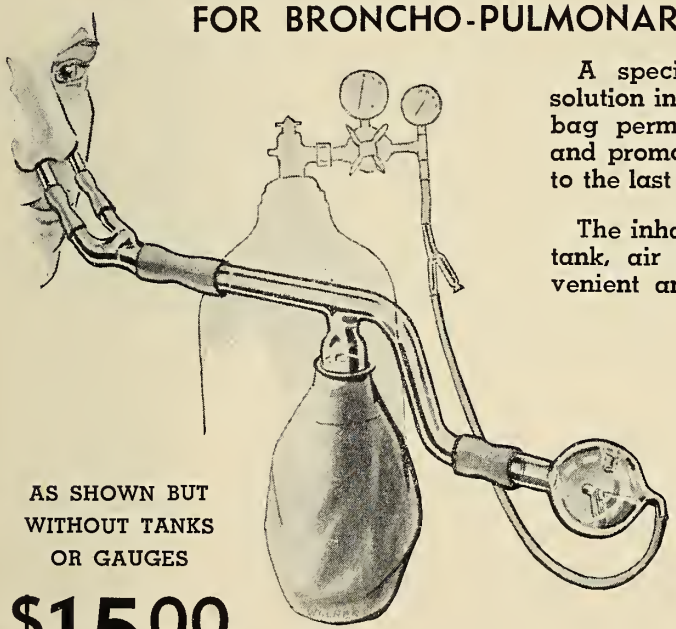
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Woman's Auxiliary

For the first time since the state and county medical society Auxiliaries were organized in 1927, the State Executive Board met in Saginaw on January 8, 1946. A luncheon at 12:30 P.M. was held at the Bancroft, followed by the Midyear Board meeting.



MRS. HARVIE

Mrs. L. C. Harvie, president, conducted the meeting. Mrs. Guy L. Kiefer, honorary president, gave a few words of welcome and encouragement. The regular order of business followed. Reports from the county presidents were given.

Mrs. Harvie and Mrs. R. H. Alter divided the reports on the district meeting in Chicago.

Mrs. Harvie gave quotations from the address by Dr. Joseph S. Lawrence, Executive Director of the Washington AMA Office to the National Conference of the Woman's Auxilary to the A.M.A. in Chicago, December 5, 1945. Discussing the new Wagner-Murray-Dingell Bill, Dr. Lawrence stated:

"It makes no provisions for financing. . . . A Congressman from Vermont said that in England it was found necessary to employ one inspector for each 100 patients." "With our population of 130,000,000, if we had one inspector for each 1,000 patients, the government would have to employ *130,000* inspectors—these would be supervised over—all pyramiding up into Washington. Washington, of course, would supervise drugs, et cetera, employing another *130,000;* auditors estimated conservatively at *100,000;* statisticians to determine how many people ill, how many beds, et cetera. . . . *10,000* of these; stenographers, clerks, telephone operators and others . . . approximately *150,000* . . . a conservative total of *520,000.* Figuring 520,000 on an average salary of $3,000, it would cost the government more than one and one-half billion dollars—AND NOT YET THOUGHT OF THE PATIENT.

"Then, there is printing of forms, rentals, publicity, et cetera, so, if this bill were to become law, we would add to our national debt at least $5,000,000,000 annually for medical care, and only one-half of that would really be for medical care.

"If this bill goes into effect, we won't have hospital facilities, we won't have doctors and nurses to care for the patients and that will be a great disappointment.

"An insurance man estimated that the operation of the WMD Bill would cost this government in the vicinity of 15 billion dollars annually."

Regarding S191, Hospital Construction Bill approved by the A.M.A., Dr. Lawrence stated: "It is a most excellent bill, but most excellent as it is, it will be hard to pass it; however, I think it will pass." (This offers $5,000,000 for surveys, et cetera.)

Write Dr. Lawrence for information regarding medical legislation. Send him any good material, cartoons, et cetera. Ask him to make a personal call on your Congressman in Washington. He will gladly do this. His address is: Dr. Joseph S. Lawrence, 1835 Eye St., N. W., Washington 6, D. C. Telephone: Ex. 3257 or Republic 4-600 Ex. 900.

Following this business meeting of about 35 members, officers, committee chairmen, and county presidents, a tea was served by the Saginaw County Auxiliary members, honoring the State Board members.

Mrs. Harvie had as her guests all who could possibly stay over for a dinner meeting in Frankenmuth. About twenty were present. Mrs. Alter's car caught fire, and Mrs. Kiefer, as usual, was in the middle of all the excitement. However, none was hurt, and the damage to the car slight and the return trip was made following the dinner.

* * *

BAY COUNTY

Twenty-four members of the Bay County Auxiliary met at the home of Mrs. T. G. Wilson, in October.

At the business meeting the group voted to contribute to the War Chest and Community drive, to send *Hygeia* magazine to all high schools in the county, the Y.M.C.A. and Y.W.C.A., the Civic League and Bay City Junior College. Bridge was played during the social hour. Mrs. G. M. Brown won the prize.

The November meeting was held in the doctors' staff room at General Hospital. Dr. Harold H. Heuser showed movies taken in Africa, and in northern Michigan, and a travelog from the Greyhound Bus Lines.

At the December meeting held in the staff room at General Hospital, the evening was spent in playing games.

Twenty-one members of the Auxiliary met at the home of Mrs. J. W. Wilcox for the January meeting. Dessert was served and the business meeting followed. Mrs. C. L. Hess, president, conducted the meeting. Mrs. T. G. Wilson reviewed an article on heart disease from *Hygeia,* and Mrs. W. S. Stinson discussed an article on cancer from *Hygeia.* Mrs. M. R. Slattery and Mrs. V. H. Dumond served on the committee.

* * *

ST. CLAIR COUNTY

Mrs. A. L. Callery was elected president of the Auxiliary of the St. Clair County Medical Society at the meeting following a buffet dinner in the home of Mrs. Clyde S. Martin, the first of the winter series of bridge dinners. Mrs. K. B. LeGalley was elected vice president; Mrs. Edgar C. Stites, president-elect; Mrs. Charles L. Borden, secretary, and Mrs. W. E. B. Hall, treasurer.

* * *

Dr. F. T. Andrews has been appointed chairman of the Advisory Committee to the Women's Auxiliary.

* * *

Please send Auxiliary news to the Press Chairman, Mrs. A. D. Allen, 2309 Nurmi Drive, Bay City, Michigan.

* * *

Where Is Your Auxiliary's News?

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What's What

The attention of all members of the Society is invited to the 1945 audit of the Michigan State Medical Society, certified by Ernst & Ernst. See pages 382, 386, 388 and 390.

* * *

The American Board of Ophthalmology announces its 1946 examinations will be held in San Francisco, June 22-25, 1946. The Secretary is S. Judd Beach, M.D., Portland, Maine.

* * *

J. W. Savage, former Executive Secretary of the West Virginia Medical Association, has been appointed Executive Director of the National Foundation for Infantile Paralysis .

* * *

A. J. Baker, M.D., Grand Rapids, addressed the Ionia Rotary Club on March 20. His subject was "The Facts About Socialized Medicine." Dr. Joseph Johns of Ionia was Program Chairman.

* * *

J. W. Hirschfeld, M.D., and *Matthew A. Tilling, M.D.,* Detroit, are co-authors of an article, "In Vitro Action of Streptomycin on Bacteria," which was published in *JAMA* of January 12.

* * *

LeMoyne Snyder, M.D., Lansing, and *Wm. J. Burns,* Executive Secretary of the Michigan State Medical Society, have been appointed as members of the Committee on Medical Jurisprudence of the State Bar of Michigan by President Ben O. Shepherd.

* * *

The financial records of the Michigan State Medical Society are audited annually by Ernst & Ernst, certified public accountants. The last audit was made as of December 30, 1945, and the report appears in this issue of JMSMS.

* * *

The American Association for the Study of Goiter will hold its annual meeting at the Drake Hotel, Chicago, June 20, 21, 22. Those who desire to read papers or to learn about the Van Meter Prize Award may contact S. F. Haines, M.D., Mayo Clinic, Rochester, Minnesota.

* * *

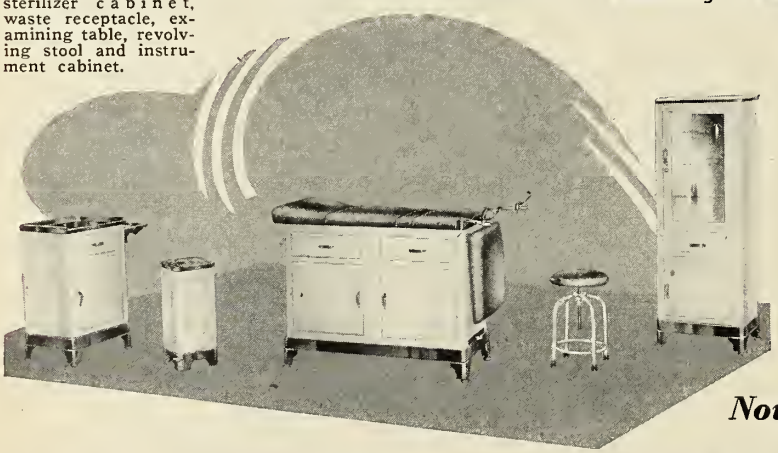
The American Association of Industrial Physicians and Surgeons invites MSMS members to enter its competitive scientific exhibit award, to be held in connection with the Industrial Health Conference at the Sherman Hotel, Chicago, April 8-13, 1946. For complete information, write H. Glenn Gardiner, 28 E. Jackson Blvd., Chicago 4, Illinois.

(Continued on Page 398)

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(Continued from Page 396)

L. J. Gariepy, M.D., and *Paul C. Henley, M.D.*, Detroit, are authors of an original article "Acute Suppurative Appendicitis with Abscess Formation and Subsequent Perforation of the Anterior Abdominal Wall" which appeared in the *American Journal of Surgery,* December, 1945.

* * *

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, has been invited to be guest speaker at the Convention of the National Council of Catholic Nurses, in Toledo, on May 24. Dr. Foster's subject will be "The Changing Trend in Medical Care and What It Means to the Nurse."

* * *

John S. DeTar, M.D., Milan, Chairman of the MSMS Public Relations Committee, spoke March 17 before the Charles Wesley Club of First Methodist Church, Ann Arbor, on "The Evils of Socialized Medicine."

* * *

The Cancer Clinic of the Genesee County Medical Society, held March 20 in Flint, attracted a registration of 261 doctors of medicine. At the public meeting, following the day's clinic, 125 laymen were present. The Genesee County Medical Society voted to make the Cancer Clinic an annual event.

* * *

Dorothy Thompson, the columnist, says: "Co-operative medical schemes are voluntary, efficient, cheap of administration, and cheap for the participants, and could be standardized on a high level. State schemes are bureaucratic, heartless, and open to dangerous collusion between assembly-line physicians and patients at the public cost—as those know who have lived under them."

* * *

Doctor, how do you like the new type (Baskerville) being used in Volume 45 of JMSMS? Also, does the new style cover—without "curlycues"—meet with your approval? The 1946 JMSMS has been modernized, throughout, from cover to cover. Your publication is featuring more scientific articles and additional socio-economic information. This, together with the up-to-date format of JMSMS, makes it a leader among state medical society publications.

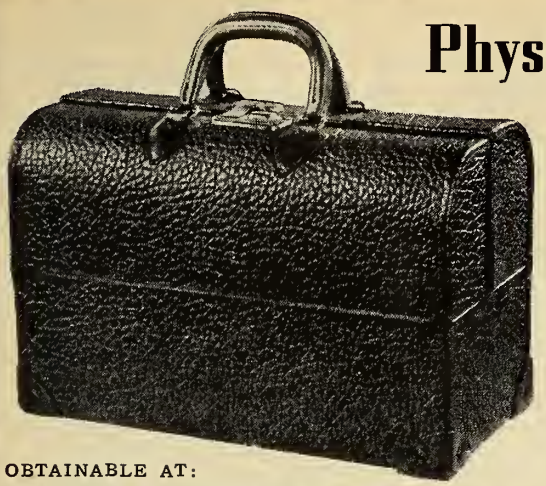
* * *

Samuel J. Nichamin, M.D. Detroit, while on active duty with the U. S. Public Health Service at Memphis, Tenn., was the author of a paper published in the *Journal of the American Medical Association,* October 27, 1945, entitled "Clinical and Epidemiological Aspects of Epidemic Pleurogynia." In the *Journal AMA* of February 17, 1945 appeared a paper in which he collaborated with three others, entitled, "Early Immunization against Pertussis with Alum Precipitated Vaccine."

* * *

The Victory Banquet of Mount Carmel Mercy Hospital, Detroit, was held at the Statler Hotel, Detroit, on January 30. Two hundred and thirty-seven guests were present to hear Congressman George A. Dondero speak on "Economic Conditions in Europe" and Professor Andrew A. Lobanov-Rostovsky of the University of Michigan answer the question: "Will Peace Come to Asia?" Henry L. Smith, M.D., Detroit, was toastmaster, and

(Continued on Page 400)



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(Continued from Page 398)

was assisted by the Clinic and Program Committee: L. J. Gariepy, M.D., Henry J. Kehoe, M.D., Arthur K. Northrop, M.D., Herbert Naylor, M.D., and M. H. Miller, M.D.

* * *

James F. Darby, M.D., St. Ignace, celebrated fifty years of medical practice in Mackinac County on February 13. Dr. Darby, at the age of seventy-four, is still in active practice. He was born in Dresden, New York, August 29, 1871. He was graduated from the Michigan College of Medicine and Surgery, Detroit, in 1895, and started practicing in St. Ignace in 1896.

Dr. Darby was honor guest at an American Legion banquet on the fiftieth anniversary of his arrival in St. Ignace.

* * *

The Second Councilor District Meeting was held in Jackson on Tuesday, February 19. Physicians from Jackson, Ingham, Hillsdale, Lenawee and Calhoun Counties were present. R. S. Morrish, M.D., Flint, President of the Michigan State Medical Society, spoke on "This Day of Medical Transition." L. Fernald Foster, M.D., Bay City, State Society Secretary, discussed "Modern Medical Public Relations."

"Michigan's Plan for Home-Office Medical Care of Veterans" was explained by J. C. Ketchum, Detroit, Executive Vice President of Michigan Medical Service. This veteran care program, to relieve congestion in government facilities for veterans having service-connected disabilities, has already enlisted the co-operation of 3,000 Michigan practitioners, according to Mr. Ketchum. The plan makes possible periodic examination or treatment of such veterans by their own physicians. The initial contract with Michigan Medical Service covered home-office medical care, but a later contract between the Veterans Administration and Michigan Hospital Service included hospitalization for veterans, effective April 1.

O. O. Beck, M.D., Birmingham, Vice Chairman of the MSMS Council, spoke on "The Fourteen Firsts of Michigan."

J. S. DeTar, M.D., Milan, Vice Speaker of the MSMS House of Delegates urged the need for personal contacts by physicians with their patients in presenting facts on socio-economic problems.

One hundred and thirty-two physicians were in attendance.

* * *

Prize Essay Contest

The American Association of Obstetricians, Gynecologists and Abdominal Surgeons Foundation announces that the annual prize contest will be conducted again this year. For information address—Dr. Jas. R. Bloss, Secretary, 418 11th Street, Huntington 1, W. Va.

* * *

Michigan Plan

The North Carolina Eye, Ear, Nose and Throat Society, September 7, 1945, adopted a set of resolutions calling upon the President of the North Carolina State Medical Society to appoint a committee to study medical

(Continued on Page 402)



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(Continued from Page 400)

and hospital insurance plans and included the following, "That this committee make a particular study of the 'Michigan Plan.'"

* * *

Central States Dermatological Society

The next meeting of the Central States Dermatological Society will be held in Detroit, at Harper Hospital on April 27, 1946, with clinics beginning at 2:00 p.m. C. E. Reyner, M.D., Henry Ford Hospital, is secretary-treasurer, to whom communications should be addressed.

* * *

Quarterly Review of Pediatrics

The *Quarterly Review of Pediatrics,* a new publication, is announced to appear in February, May, August and November. Medical articles of interest to pediatricians will be abstracted as soon after publication as possible and presented in this journal. The *Review* will serve also as a guide to original sources for more intensive study. The Editor-in-Chief is Irving J. Wolman, M.D., The Children's Hospital, Philadelphia 46, Pa.

* * *

National Science Foundation

S. 1720 was introduced by Mr. Kilgore of West Virginia (for himself, Mr. Johnson of Colorado, Mr. Pepper of Florida, Mr. Fulbright of Arkansas and Mr. Saltonstall of Massachusetts), December 21. This is a bill to promote the progress of science and the useful arts, to secure the national defense, to advance the national health and welfare, and for other purposes, and was referred to the Committee on Military Affairs.

Comment.—Subsequent to the hearings accorded the earlier bills providing for the subsidizing of scientific work by the Federal government, Mr. Kilgore drafted a new bill to be entitled, "The National Science Foundation Act of 1945." The bill provides that the Foundation shall be presided over by an administrator and a deputy administrator to be appointed by the President. There are to be at least eight divisions, one of which will be a Division of Health and Medical Sciences, and each to be headed by a director appointed by the administrator. The administrator will consult and advise with the chairmen of the scientific divisions and the national science board, consisting of nine members appointed by the President. The administrator is authorized to award scholarships and fellowships to persons for scientific study or scientific work at non-profit institutions.

* * *

TWENTY-FIFTH ANNIVERSARY—HIGHLAND PARK GENERAL HOSPITAL

The Highland Park General Hospital will celebrate its twenty-fifth anniversary by holding an all-day clinic on April 24, 1946, ending the day with a guest speaker and banquet at the Wardell-Sheraton Hotel.

Morning Session—8:30 A. M.

Clinical Pathological Conference

"Streptomycin"—Edw. N. Cook, M.D., Mayo Clinic, Rochester, Minn.

(Continued on Page 404)



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(Continued from Page 402)

"Diabetes in Pregnancy"—Priscilla White, M.D., Boston, Massachusetts.

"Newer Aspects of Endometriosis"—James Goodall, M.D., Montreal, Canada.

"Endometriosis"—James R. Goodall, M.D., Montreal, Canada.

Luncheon—1:00 P. M.

Plate luncheon, courtesy of Highland Park General Hospital.

Afternoon Session—2:00 P. M.

"Functional Consequences of Coronary Occlusion"—Carl Wigger, M.D., Cleveland, Ohio.

"Surgical Treatment of Gastric Lesions"—Samuel F. Marshall, M.D., Surgeon Lahey Clinic, Boston, Massachusetts.

"Notes on the Surgical Management of Cancer of the Colon and Rectum"—Fred Rankin, M.D., Brig. Gen. U. S. Army, Chief Consultant in Surgery, Lexington, Kentucky.

Speaker—To be announced.

Cocktail Hour—7:00 P. M.

At the Wardell-Sheraton Hotel

Evening Banquet—7:30 P. M.

At the Wardell-Sheraton Hotel

Plinn W. Morse, M.D., Toastmaster.

Presentation of Oil Portrait of Frank C. Witter, M.D., to Hospital

Guest Speaker—Floyd K. Armstrong, Professor Emeritis Economics and Finance, M.I.T.

There will be no fee for the Clinic. Tickets for the banquet will be $5.00 each. Dr. Frank Witter is chairman of the Committee on Arrangements.

* * *

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The annual meeting of Industrial Physicians and Surgeons will be held in Grand Rapids, March 27, 1946. Following is the tentative program:

Morning Session

(Grand Rapids Stamping Division of General Motors Corp.)

9:30 a.m. Registration.

10:00 a.m. Program.

Afternoon Session

"Thoracic Trauma"—Wm. McC. Tuttle, M.D., Detroit.

"Tendon Surgery of the Hand"—Michael L. Mason, M.D., Chicago.

"Occupational Restoration Following Trauma"—H. D. Storms, M.D., Director, Rehabilitation Clinic, Ontario Workmen's Compensation Board.

Evening Session

President's Address—Leon E. Sevey, M.D., Grand Rapids.

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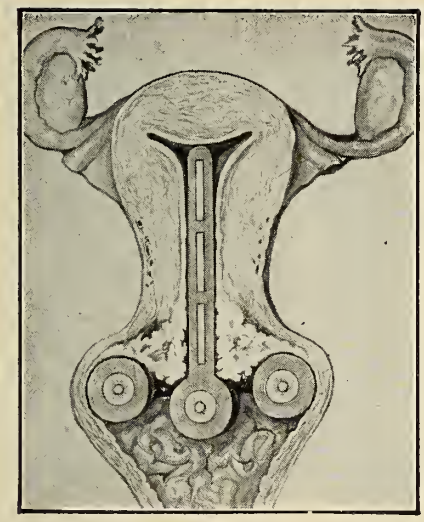
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Correspondence

Editor, Journal, Michigan State Medical Society:

The editorial article which appeared in the January 5 issue of the *AMA Journal* concerning work done by Dr. Preioni of Argentina entitled: "The Relation of Infantile Paralysis in Epizootic Avian Paralysis" seems to support my theory as to the possibility of the virus being carried by swallows. Reference: my communique in the May, 1945, issue of the MICHIGAN STATE MEDICAL JOURNAL.

For the past year and a half I have been trying to stimulate the interest of investigators in a bug described in a library reference book by Barrows, entitled "Michigan Bird Life."—Quotation from Page 543.

"It is a common belief among country people that the Martin brings bed bugs to its nesting place and in that way houses and barns become infested. The only foundation for this belief lies in the fact that a peculiar bug belonging to the same family as the bed bug does infest Martins' nests and is doubtless carried from place to place by the birds. This insect, however, is not the bed bug and cannot live on other animals than swallows. There is, therefore, no danger of its infesting dwelling houses."

Note: The only habitat of this bug is the swallow.

Now Dr. Preioni has shown that avian paralysis simulates or is the same as poliomyelitis and he states that he believes infantile paralysis to be spread by the bite of a louse which has become infected by biting an infected bird.

With this in mind, I am writing this communique in the hope of stimulating interest in the possibility of birds and particularly swallows being the carriers of the virus, and also in the hope that I may get someone to investigate the described bug which might be the intermediary host.

I am also writing to Dr. Preioni of Argentina to arouse his further interest in this matter.

RANDALL M. O'ROURKE, M.D.

Epidemiology of Tinea Capitis in Detroit School Children

(Continued from Page 352)

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Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

MANUAL OF DIAGNOSIS AND MANAGEMENT OF PERIPHERAL NERVE INJURIES. By Robert A. Groff, M.D., Lieutenant Colonel, MC, AUS. Formerly Assistant Professor of Surgery, Jefferson Medical College, and Assistant Professor of Neurosurgery, Graduate School of Medicine, University of Pennsylvania. And Sara Jane Houtz, B.S., First Lieutenant (P.T.) AUS; With an Introduction by I. S. Ravdin, M.D., Brigadier General, MC, AUS; John Rhea Barton, Professor of Surgery, University of Pennsylvania. One hundred eleven original illustrations. Philadelphia, London, Montreal: J. B. Lippincott Company, 1945. Price $8.00.

This is a manual of diagnosis, with descriptions of the nerves involved in injury or accident, or disease, with pictures of the outlined function or loss of function. The pictures are clear and exact, giving a comprehensive understanding of the problem. Function or loss of function is illustrated, with tabulation of injuries that would be caused by the lesion. There is ample description of methods of repair, where to obtain material, and how best to accomplish the repair. Injuries or lesions of the cranial and peripheral nerves are all covered. This is an excellent manual, giving the essentials that are needed for diagnosis, and outlining of repair or physical restoration.

EVERYDAY PSYCHIATRY: Concise, Clinical, Practical. By John D. Campbell, M.D., Commander, MC, USNR; Chief Neuropsychiatrist, U.S. Naval Base Hospital No. 8; Formerly Chief Neuropsychiatrist, U.S. Naval Hospital, Charleston, S.C., and Visiting Lecturer in Psychiatry, Medical College of South Carolina; Diplomate American Board of Neurology and Psychiatry. Designed for Practitioners and Students. Philadelphia, London, Montreal; J. B. Lippincott Company, 1945. Price $6.00

Diagnosis and treatment of mental disease is a problem for every doctor of medicine. Many phases of life enter into the field, and produce abnormal conditions. Disturbances of intelligency, emotional stability, psychosexual development, personality changes, alcoholic states, are all factors to be studied in diagnosing and treatment of mental and emotional disturbances. This book is clearly written, well told, and is a guide in psychiatric studies when the first changes are noticeable. Recognition of abnormal states early is a function of the general practitioner, who should be familiar with the materials of this text. It is written with that end in view.

MEN WITHOUT GUNS, By DeWitt Mackenzie, War Analyst of the Associated Press; Descriptive Captions by Major Clarence Warden, MC, U. S. Army; Foreword by Major General Norman T. Kirk, Surgeon General, U. S. Army. 177 Drawings including 118 Plates in full color. 152 pages. Philadelphia: The Blakiston Company, 1945. Price $5.00.

The work of the Army Medical Corps in the war has been lauded as most efficient but this book opens the scenes to the interested observer in a method impossible to understand unless personal opportunity for knowledge is given. Many famous artists have contributed of their skill to make this book one of the most beautiful and most instructive we have had the opportunity to

(Continued on Page 410)



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(Continued from Page 408)

see. It is a work of art, giving color pictures of the intimate, anguishing and sordid sufferings of our soldiers, and their alleviation by the devoted members of the Medical Corps. The book is a library piece you will prize.

THE EXTREMITIES, By Daniel P. Quiring, Ph. D., Head of the Anatomy Division, Cleveland Clinic Foundation, and Associate Professor of Biology, Western Reserve University; Beatrice A. Boyle, Artist, Cleveland Clinic Foundation; Erna L. Boroush, M.A., Fellow, Anatomy Division, Cleveland Clinic Foundation; Bernadine Lufkin, A.B., Former Secretary, Research Division, Cleveland Clinic Foundation. Illustrated with 106 Engravings. Philadelphia: Lea & Febiger, 1945. Price $2.75

This book is an accumulation of diagrams showing the origin, insertion, action, arterial and nerve supply of the extremities. Function is described. References in each instance are given to Gray and Cunningham. This book will be handy in refreshing when exact knowledge is needed. It is not complete, but is exact and specific.

Tidal Irrigation

(Continued from Page 357)

ease of operation, the slight demands for nursing care, inexpensiveness, the effectiveness of bladder drainage, and the comfort of the patient.

References

1. Munro, D.: The activity of the urinary bladder as measured by a new and inexpensive cystometer. New England J. Med. 214:617, (March 26) 1936.
2. Webb, E. A.: A combined cystometer and tidal bladder irrigator. Univ. Michigan Hosp. Bull., 9:69, (Aug.) 1943.

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SUMMARY OF THE EMIC PROGRAM IN MICHIGAN

(Continued from Page 392)

of maternity cases was 94 per cent and of pediatric cases 6 per cent, as compared with a case load in December, 1945, of maternity cases 78 per cent and of pediatric cases 22 per cent.

Peak months for applications were June, 1944, with 1,825 applications and August, 1944, with 1,781 applications. It is of interest to note that for the month of January, 1946, there was a total of 1,810 applications, making that month the third highest for applications since the beginning of the program.

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Mr. Hepler delivered a series of lectures on the treatment of water supplies, sewage disposal methods, and stream pollution, before the students of the School of Tropical Medicine. He will also address the Puerto Rico Public Health Association and the Caribbean Water Works Association.

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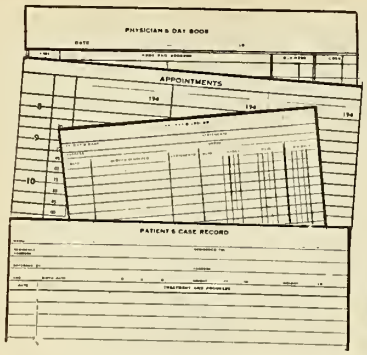
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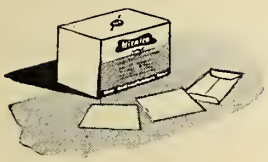
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Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available Carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association.

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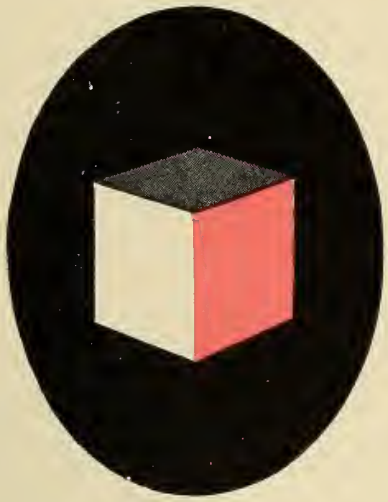
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Available in boxes of 6 and 12 suppositories.

Hemorrhoidal Suppositories

Many Service-Connected Disabilities Receiving Family-Physician Care

The "Home-Town" medical care program is now in full swing and hundreds of Michigan veterans *with service-connected disabilities* are receiving medical care from their own doctors.

The doctors of Michigan have given splendid support to this program, but more doctors are needed if the goal of 100 per cent participation is to be realized. Every doctor planning to participate who has not yet registered is urged to return his registration card as soon as possible.

Prior planning has been chiefly responsible for the speed with which the program has been put into operation. The questions in examination and treatment forms have been reduced to a minimum and methods of processing authorizations have been streamlined to effect an efficient and simplified system.

Undoubtedly, many doctors have or will receive inquiries from veterans in regard to treatment and care. For the information of doctors rendering service to veterans, the following method of procedure has been made standard:

Procedure for Physicians

1. In all cases the authorization for medical care to veterans with service-connected disabilities must come from the Veterans Administration. Neither the doctor nor Michigan Medical Service can authorize examinations or treatment.

2. When a veteran applies for and receives authorization for medical care by his own physician, the authorization is sent direct to Michigan Medical Service. Michigan Medical Service then sends the veteran the authorization and a reporting form for the type of service authorized by the Veterans Administration.

3. Two types of forms are used for this purpose. One form covers examinations for the rating of disabilities and the other covers treatments for existing conditions. The veteran, upon receipt of his authorization and his examination or treatment form, goes direct to his physician. No additional procedure is necessary on his part to obtain service.

4. When the doctor has rendered the services authorized for the veteran, he should complete the forms and return them immediately to Michigan Medical Service. Prompt action by the doctor in this connection is very important to the veteran and to himself. First, it will facilitate processing the completed forms by Michigan Medical Service for payment of fees to the doctors. Second, it will enable the Veterans Administration to complete the file on the veteran and in the case of an examination for disability rating it will speed adjudication of the veteran's claim for a disability pension.

VETERANS ADMINISTRATION

State Contact Offices—Under Michigan Regional Office

Battle Creek
Mr. James M. Ellenburg, Contact Representative
Veterans Administration
Percy Jones General Hospital
Battle Creek, Michigan
Phone: 26511 Ex. 578

Fort Custer
Mr. Neal D. Van Haften, Contact Representative
Veterans Administration
Fort Custer, Michigan
Phone: 7145 Ex. 265

Grand Rapids
Mr. O. F. Scoville, Contact Representative
Veterans Administration
Room 540, Keeler Building
Grand Rapids, Michigan
Phone: 8-9223

Marquette
Mr. Patrick Bennett, Contact Representative
Veterans Administration
Longyear Building
Marquette, Michigan
Phone: 247

Lansing
Mr. John L. Hurrle, Contact Representative
Veterans Administration
Michigan Theatre Arcade 12A
Lansing 2, Michigan
Phone: 4-9116

Saginaw
Mr. Lorne F. Mennell, Contact Representative
Veterans Administration
Board of Commerce Building
Saginaw, Michigan
Phone: 2-2487

Flint
Mr. Charles P. McCarty, Contact Representative
Veterans Administration
205 C.I.O. Building
Flint, Michigan
Phone: 4-3762

(Continued on Page 458)

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Therapeutically, Ertron is different from any other antiarthritic. Many patients in large series of clinical studies have experienced restoration of movement in affected joints, relief of pain and measurable evidence of reduced swelling. Comprehensive published works are evidence of established therapeutic action.

CHEMICAL COMPOSITION

It can now be said that chemically, too, Ertron is unique. Ertron differs in chemical composition from the ordinary vitamin D preparations—a fact that undoubtedly accounts for the excellent results obtained with Ertron.

Simply stated, Ertron is electrically activated vaporized ergosterol prepared by the Whittier Process. Each capsule contains 5 mg. of activation-products having a potency of not less than 50,000 U.S.P. Units of vitamin D.

Ertron contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure chemical form further establish the chemical as well as the therapeutic uniqueness of Ertron.

ERTRONIZATION THERAPY

Physician control of the arthritic patient is essential for optimum effect. To Ertronize employ Ertron in adequate daily dosage over a sufficiently long period to produce beneficial results. If signs of overdosage appear, discontinue medication for about ten days—then continue with three capsules per day gradually building up to the patient's level of tolerance.

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SUPPLIED IN BOTTLES OF 50, 100 AND 500 CAPSULES

Parenteral for supplementary intramuscular injection



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Outstanding Medical Public Relations Conference

Eighty-seven attended the Public Relations Conference sponsored by the Michigan State Medical Society and held at the Hotel Olds, Lansing, on February 21. Enthusiastic praise was voiced for an unusual and very informative program.

Presiding at the morning session was H. A. Miller, M.D., Lansing, Chairman of the Legislative Committee, and in the afternoon J. S. DeTar, M.D., Milan, Chairman of the Public Relations Committee.

J. W. Holloway, Jr., Chicago, Director, Bureau of Legal Medicine and Legislation, American Medical Association, opened the meeting with a dissertation on legislation which today challenges the medical profession. His address was titled, appropriately, "The Threat."

Arguments of the proponents of this legislation were offered in the address "Better Medical Care for the American People" by Ernest B. Harper Ph.D., East Lansing, Head of the Department of Social Service, Michigan State College.

C. L. Candler, M.D., Detroit, Chairman of the Special Committee on Radio, announced during the dinner hour that "American Medicine," the new MSMS commercial radio program, would be aired on Tuesday, March 5, at 8:15 p.m., on the Michigan Radio Network and other stations.

Dr. Sensenich Gives the Facts

R. L. Sensenich, M.D., Chairman, South Bend, Indiana, Board of Trustees A.M.A., opened the afternoon session with a revealing word picture of "The Facts—Our Point of View."

A. S. Brunk, M.D., Detroit, President of Conference of Presidents and Other Officers of State Medical Associations, listed the objectives of the Medical Profession, pointing out that they are, in reality, our opportunities.

In a down-to-earth lecture, Edward F. Stegen, Chicago Associate Administrator, National Physicians Committee, outlined "Our Job and How to Do It."

A Clinic consisting of three skits demonstrating personal contact work and public platform technique followed the regular speakers. J. S. DeTar, M.D., of Milan, L. W. Hull, M.D., Detroit, Frank J. O'Donnell, M.D., Alpena, and Hugh W. Brenneman, MSMS Public Relations Counsel, comprised the cast.

In the discussion period, Mr. Thomas A. Hendricks, Chicago, Secretary of the AMA Council on Medical Service and Public Relations, E. D. King, M.D., Detroit, and J. C. Ketchum, Detroit, Executive Vice President of the Michigan Medical Service, urged better public relations and offered thoughtful suggestions concerning action to be taken by the listeners.

Eighty-seven Attend Conference

County Society Public Relations Committee members present were: R. H. Alter, M.D., Jackson; J. K. Altland, M.D., Barry; A. L. Arnold, M.D., Shiawassee; E. W. Blanchard, M.D., Sanilac; Robert S. Breakey, M.D., Ingham; J. Russell Brink, M.D., Kent; E. T. Brunson, M.D., Allegan; Sara M. Burgess, Genesee; L. G. Christian, M.D., Ingham; R. H. Criswell, M.D., Bay; Otto K. Engelke, M.D., Washtenaw; L. C. Harvie, M.D., Saginaw; L. Dell Henry, M.D., Washtenaw; Albert Heustis, M.D., Branch; M. A. Hoffs, M.D., Ionia-Montcalm; L. W. Hull, M.D., Wayne; David M. Kane, M.D., St. Joseph; W. B. McWilliams, M.D., Clinton; H. J. Meier, M.D., Branch; A. P. Murphy, M.D., Saginaw; F. J. O'Donnell, M.D., Alpena-Alcona-Presque Isle; E. S. Parmenter, M.D., Alpena; R. C. Perkins, M.D., Bay; J. S. Rozan, M.D., Ingham; E. C. Sites, M.D., St. Clair; Howard T. Stuch, M.D., Allegan; E. A. Thayer, M.D., Jackson; O. Van der Velde, M.D., Ottawa; J. A. VanLoo, M.D., Ionia-Montcalm; Gordon H. Yeo, M.D., Mecosta-Osceola.

Members of the MSMS Public Relations and Legislative Committees attending were: Clarence L. Candler, M.D.; S. L. Loupee, M.D.; Edward D. King, M.D.; J. J. McCann, M.D.; Harold A. Miller, M.D.; Gilbert B. Saltonstall, M.D.; George Waters, M.D.; A. V. Wenger, M.D.

MSMS Officers and Councilors who attended included: President R. S. Morrish, M.D.; Secretary L. Fernald Foster, M.D.; W. E. Barstow, M.D.; A. S. Brunk, M.D.; T. E. DeGurse, M.D.; Fred Drummond, M.D.; Wilfrid Haughey, M.D.;

(Continued on Page 432)

England's Panel Practice

National Health Insurance in England is compulsory for *all* with incomes of less than 420 pounds sterling ($1,680) per year, which group makes up well over 90 per cent of the population.

The 1911 law *does not cover the dependents* of the wage earner. Another arrangement must be worked out for their care.

Cost of 32 cents per week per individual is borne equally by employer and employe. Employe must provide for his dependents through other means, usually through a "Public Medical Society" which is a panel system operated by local doctors on a voluntary basis. Cost is 8 cents per week per individual with limit of 28 cents for a single family.

It is interesting to note the distribution of the income by the National Health Insurance (politically controlled) as compared to the "Public Medical Society" (locally controlled by doctors):

National Health Insurance (Panel System)

For doctor	12.5%
For drugs	3.5%
For mileage fees	.5%
For administration	83.5%

Public Medical Society

For accountant	7.5%
For collector	12.5%
For doctor	80.0%

The average panel doctor has 2,000 patients on his panels. Average income from such a panel is about 1,000 pounds sterling ($4,000). One individual panel doctor had 9,000 calls in one year so that his average income per office or house call was 2 shillings—or 40 cents. In addition, the doctor has patients to care for under the "Public Medical Society" plan numbering possibly 1,000. These being largely women and children who are dependents of wage earners, they require at least thirty calls per day. Add to this the ten or so private patients and one can see how overworked a conscientious doctor would be.

Doctors are greatly restricted in the drugs they may use—even to being subjected to heavy fines for using drugs not specified by the political administrators.

Again, doctors are restricted by the administrators as to what type of work they can perform—usually strictly limited to what a general practitioner is supposed to do and this has been very narrowly interpreted by the courts.

Those who are authorized to do surgery are paid very small fees—an appendectomy nets them about 1 pound shilling or $4.00!

The average time required for a panel patient office call is 3 minutes—one minute to usher the patient in and out, one minute for questioning and examination, and one minute for writing the prescription and record.

The panel doctor is constantly harrassed by inspection of his records and if these fail to pass he is fined anything from $400 to $800 without further process of law.

It would appear there is a tremendous discrepancy in the administrative costs of politically controlled medicine in England compared to local voluntary profession controlled plans.

Conclusions: The panel doctor is overworked and underpaid and overrestricted in his practice, so it is not possible for him to render good medical care to all his patients, particularly those on the panel.—Digest of article by Capt. Paul K. Maloney, MC, AUS, Published in *King's County Medical Society Bulletin,* New York.

OUTSTANDING MEDICAL PUBLIC RELATIONS CONFERENCE

(Continued from Page 430)

R. J. Hubbell, M.D.; P. L. Ledwidge, M.D.; E. F. Sladek, M.D.; E. R. Witwer, M.D.; J. S. DeTar, M.D.

Other Guests: Mr. Ray Baker, Ann Arbor; Mrs. R. S. Breakey, Lansing; Thelma Brewington, Lansing; Mildred Cardwell, Lansing; F. R. Nicholas Carter, M.D., South Bend; Mr. Gordon Davis, Detroit; Alfred H. Ellison, M.D., South Bend; L. G. Goodrich, Detroit; Mr. Ernest B. Harper, East Lansing; Mrs. L. C. Harvie, Saginaw; Mr. Tom Hendricks, Chicago; Mr. J. W. Holloway, Jr., Chicago; Jay C. Ketchum, Detroit; Else Kolhede, Detroit; Mr. Raymond W. Mody, Detroit; R. L. Sensenich, M.D., South Bend; William A. Shilling, Pinckney; Mr. George R. Sidwell, Lansing; Edward F. Stegen, Chicago; Mrs. E. D. King, Detroit; Mrs. C. L. Candler, Detroit.

What Do We Learn from New Zealand?

Much has been heard of the social security system in New Zealand. Although a relatively recent date (1939), this is one of the most comprehensive in existence. To it, advocates of expansion of the present system in this country have "pointed with pride." They have referred particularly to the health insurance and medical program as clearly indicating the practicability of a compulsory health program in the United States.

In recent months, however, less has been heard of the "wonders" of the plan from the protagonists of the socialistic compulsory insurance theory. Here is why:

The cost of New Zealand's social security program now exceeds one-third of the national income!

The compulsory health insurance system of New Zealand appears to be confronted with disturbing problems. A news dispatch in the New York Times (October 7, 1945) reports that Health Minister Arthur Nordmeyer told the House of Representatives that the government is "seriously considering whether New Zealand's free physician service will be continued." He disclosed that the Administration is negotiating with the National Medical Association to arrange a different system.

If, in spite of favorable circumstances, New Zealand apparently has been unable to keep the operation of compulsory health insurance at an even keel, it tends to show the importance of factors not strictly of a medical character. One of these may be found in the human tendency to take excessive advantage of benefits offered under a compulsory system; another may be the political pressure for increases in coverage and duration of benefits (which "incidentally" means increase in rates).

U. S. Cost May Be 15 Per Cent!

Let's consider the cost: The various compulsory health insurance expenditures alone in 1944 took approximately four per cent of total annual wages and salaries in New Zealand. However, this should not lead to the conclusion that four per cent of payroll is sufficient to finance the type of compulsory health insurance programs currently advocated in the United States. At least three points should be borne in mind:

1. The scale of benefits in New Zealand is not high. Paid for all medical benefits under New Zealand compulsory plan in the year April 1, 1944 to March 31, 1945 was $5,234,713. By comparison: during 1945, Michigan's *voluntary* plans (Michigan Medical Service and Michigan Hospital Service) paid $13,087,424.70 in benefits. Michigan Medical Service paid $4,148,923.13 and Michigan Hospital Service $8,938,501.57.

2. Surgical and some minor benefits are not included under the New Zealand plan.

3. The cost of social security should be very low in New Zealand, a country combining an advanced English civilization with a new physical environment. Yet it still took four per cent, *plus.* The Wagner-Murray-Dingell Bill calls for three per cent. Considering the above it would seem that *three per cent would be just the beginning. Fourteen or fifteen would be more reasonably accurate.*

Quoting from an article by Quentin Pope, New Zealand journalist, who looks with a cynical eye at the future of the social security program in his country: "The system has not cut sickness and has not provided adequate medical care . . . . Highlights of social security on the New Zealand model as revealed during the six years of operation are, first, the steady rise of its cost to critical totals; second, the obsession of government leaders with the plan and efforts to maintain it by devices seeking to stabilize national income at the expense of dynamic growth; third, the policy of bribing the electorate each voting time with promises of more benefits." Meanwhile, workers were told their wage tax to the Social Security fund in 1946 must be stepped up to 7.5 cents on the dollar!

All of this is more reason why we in the United States should not rush into plans of compulsory sickness insurance; why, indeed, we should dash in quite the opposite direction!

may be beyond repair, adequate systemic therapy, optimal nutrition, physiotherapy, physical and mental rest, and orthopedic measures can do much to prevent or correct deformities, relax painful spastic muscles, abolish pain, and restore useful function.

Darthronol, because of the pharmacodynamic and nutritional influences of its nine active ingredients, warrants inclusion in the complete arthritis rehabilitation program. In addition to exerting the favorable influence in arthritis attributed to Vitamin D, Darthronol plays an important role in the aim to improve the general well-being, to correct the multiple systemic disturbances frequently associated with chronic arthritis, and to restore the nutritional status to optimal levels—a truly rational approach to the rehabilitation of patients afflicted with chronic arthritis.

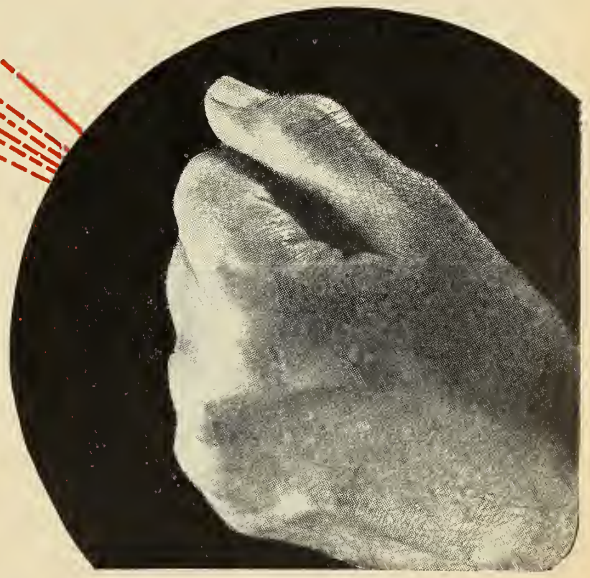
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Pyridoxine Hydrochloride	0.3 mg.
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Mixed Natural Tocopherols	3.4 mg.

(Equivalent in biological activity to 3 mg. of Alpha Tocopherol)

Even when the osseous and cartilaginous changes have become irreversible, a complete rational therapeutic program can accomplish much in abolishing pain, diminishing soft tissue swelling and restoring useful function.



ARTHRITIC

Chicago 11, Illinois

Program of Health Legislation Beneficial to the People

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore be it

RESOLVED, That the following principles for a health legislation program be adopted:

1. Establishment in the President's Cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians, and under whose jurisdiction every federal bureau and office, whose duties are related to health and medical welfare, shall be grouped.

2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care by government grants-in-aid.

3. Provide federal or state loans, or guarantees of private loans, for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled, and carried on by those who own such facilities and by the medical profession.

4. (a) Establish state-wide voluntary non-profit health care programs, in every state, based on the free choice of purveyors of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractual arrangement for payment of charges from county, state or federal funds; as a service plan for all other governmental categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law.
   (b) Any further federal or state programs for expansion of medical service to be developed within the structure of the above-described program.
   (c) National co-operation with the proposed plans of Major General Paul R. Hawley of the Veterans Administration in the therapeutic administrations to veterans for service-connected disabilities. Also for the development of veteran facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments.
   (d) All state-wide medical care programs on either a service or indemnity care basis shall be incorporated under special state-enabling acts or by already existing state statutes relating to non-profit producers' co-operatives. This will provide for either a prepayment or a reimbursement contractual service.
   (e) Group co-operation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) programs, should be accomplished.

5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to advise all the people with respect to proven measures to prevent illness, hygienic and sanitary measures, and where to go to seek help when ill or injured.

6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans, and be it further

RESOLVED, That every state medical society be invited to study, adopt and activate these principles on the state level, and that they be submitted to the AMA Council on Medical Service and Public Relations for immediate consideration as a pattern for a national health program.

Adopted by Conference of Presidents and other Officers of State Medical Societies, December 2, 1945; referred by 1945 AMA House of Delegates to the AMA Council on Medical Service and Public Relations, December 5, 1945.

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Similar to human milk



★The name is never abbreviated; and the product is not like any other infant food—notwithstanding a confusing similarity of names.

The fat of Similac has a physical and chemical composition that permits a fat retention comparable to that of breast milk fat (Holt, Tidwell & Kirk, Acta Pediatrica, Vol. XVI, 1933) . . . In Similac the proteins are rendered soluble to a point approximating the soluble proteins in human milk . . . Similac, like breast milk, has a consistently ZERO curd tension . . . The salt balance of Similac is strikingly like that of human milk (C. W. Martin, M. D., New York State Journal of Medicine, Sept. 1, 1932). *No other substitute resembles breast milk in all of these respects.*

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, olive oil, cocoanut oil, corn oil and fish liver oil concentrate.

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Debunking the Bunk about Draft Rejections

It's quite likely that the advocates of compulsory health insurance will continue to try to prove their basic premise: That the health of the American people is in a deplorable state. Professional do-gooders would have you believe that people are dying like flies of untended illness and that the cause for this terrifying condition is the interposition of a financial barrier between the sick person and the doctor, and that all that is needed to greatly elevate the standard of health in the United States is to inject government control and operation. Their most oft-repeated argument is the so-called "five million 4Fs": that the rejection by the Armed Services of this enormous number of young men reflects the deplorable state of our health as nothing else has been able to do, that private medical practice has failed, and the only remedy is socialized medicine!

Here are the facts:

1. The true figure is 4,217,000, *Not* Five Million.
2. The balance sheet:

Total rejections for physical reasons....		4,217,000
Totally blind, deaf, legless, armless....	444,800	
Mental diseases	701,700	
Idiots and imbeciles and morons.....	582,100	
Club feet and paralyses (congenital)..	320,000	
Syphilis (even under U.S.P.H.S. control)	280,000	
Hernia (congenital)	220,000	
Eye defects	160,000	
Total rejections which no program of medical care could have influenced		2,708.600
Total rejections of those who might have had preventable conditions.....		1,508,400

(In this group are those rejected for bad teeth, those who have always had cult care, and religious objectors who don't want medical care.)

With highest standards, U. S. rejection figures represent 38 per cent. With lower standards, England's rejection figures represent 50 per cent. Yet England has had compulsory health insurance for thirty-five years!!

Conclusion: It is unlikely that "the planners" would use the "five million 4F's" argument if they knew the facts—or if they were not attempting to conceal the facts.

Army Lowers Its Physical Induction Standards

Incidentally, the Army, by suddenly lowering its physical standards for induction, has deprived these propagandists of even the essence of an argument. The number of men rejected under the present standards becomes considerably less; many men who would have been rejected under previous standards are now considered fit. The Army has proven the draft statistics were without scientific foundation. The public has little or no knowledge of the measuring stick that was used, but when a nation selects the highest standard of fitness for military service that any nation has ever established, people need not be surprised if the number of rejections is greater than those of nations whose standards are considerably lower.

PRECEPTORSHIPS

In regard to the substitution of a preceptorship for residency in an ophthalmic hospital, the American Board of Ophthalmology has always accepted such training in favorable cases. During the present overcrowding of facilities, the Board expects to take a liberal attitude regarding the requirements for training.

It should, however, be pointed out that neither a residency nor a preceptorship suffices in itself to meet the requirements of the Board. Each case will still be judged on its merits in determining fitness for examination.

In entering upon preceptorship certain conditions should be kept in mind. First, the student will profit most after a sound course in the basic sciences of physiology of the eye and of vision, optics, pathology, bacteriology, chemistry, pharmacology, the relation of the eye to general disease, anatomy, embryology and neurology.

This is essential for a residency, more so for a preceptorship. While men have been accepted from preceptors not diplomates of the Board, it is obvious that the Board has more information about those teachers who have passed its examinations.

Any preceptor should understand that he is assuming a responsibility in taking a student and is not merely obtaining help in the drudgery of his office. He should be willing to give time to clinical training and the use of apparatus, slit-lamp, ophthalmoscope, tonometer and to directing the student's practice in surgery on animal eyes, assisting in operations and ultimately in the performance of them.

To cover the same amount of ground will take much longer in a preceptorship than in a residency, and students should accept opportunities to take hospital positions of all sorts as they become available.

THE SPIRIT OF MEDICINE

The true spirit of medicine is perpetually striving for higher ground, forever moving toward commendable goals. It enters the realm of the unknown in search of new truths, often revealing the cause of disease, the prevention and cure. Thus the blessings of medical science have been realized for the benefit of humanity. Medicine, animated by this spirit, seeks no reward other than freedom from bureaucratic directives, fine print bulletins, stereotyped records, incomprehensible blanks and the annoying necessity of political rating.—Editorial, *Oklahoma State Medical Journal,* April, 1946.



Since the age of two sets no ceiling on growth, and since vitamin D is constantly required for optimal absorption of bone-building minerals, continued supplementation well into childhood and adolescence beneficially influences bone structure and height.

Highly potent, convenient, natural Upjohn vitamin D preparations are available in different forms most suitable for infants, children, and adolescents.

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FINE PHARMACEUTICALS SINCE 1886

UPJOHN VITAMINS

Michigan Health Council Two Years Old

In two short years, the Michigan Health Council has undertaken a broad program for public education within the state and for close co-ordination of its activities with the national effort.

Participation in the Health Council is part of the Michigan State Medical Society public relations program.

Chief among the projects now under way through the Health Council is the organization of local community health councils. These Councils would carry the accomplishments of medical and health care to every person in the state and would co-ordinate health activities at the local level in much the same manner as has the Health Council at the state level.

The Michigan Health Council is primarily concerned with activities within the state and in this connection has made a number of contributions. Foremost among these was the sponsorship of a fact-finding survey made by the nationally recognized firm of Foote, Cone & Belding. The survey involved questioning 5,000 persons on matters pertaining to the medical and other health professions and to health care plans, both voluntary and compulsory.

The results of this survey received wide publication both in the state and nationally. However, the developments stemming from a study of this survey have been of practical benefit to the Council's sponsoring organizations. Some of these developments include:

1. Adoption by Michigan Medical Service and Michigan Hospital Service of a joint symbol to indicate that these plans are non-profit, are professionally sponsored and operated and are available to the public in one unified package. This was done because the survey showed the need for unified public education.

2. The addition of a plan by Michigan Medical Service to cover cost of *medical* care to subscribers while in the hospital. Previously only surgical services were covered. The survey showed clearly that the people wanted the additional service and would pay for it. This new service is now being tested and will be offered to additional groups as soon as sufficient experience has been accumulated.

3. A greatly increased program of public education was inaugurated. The survey pointed out very definitely that the public was astonishingly uninformed about voluntary non-profit pre-payment plans. When asked if they favored compulsory governmental health insurance, nearly 40 per cent of the people first said yes. But when they learned that alternatives such as Michigan Medical and Michigan Hospital Service were available, only 15 per cent of the people favored a governmental program. From this it was concluded that intensive public education in voluntary plans is essential.

(To be Continued)

SODA FOR WOOD ALCOHOL POISONING

Four Navy doctors, who made a study of methyl (wood) alcohol poisoning, believe the essential principle of treatment is the correction of acidosis with an alkali, such as soda.

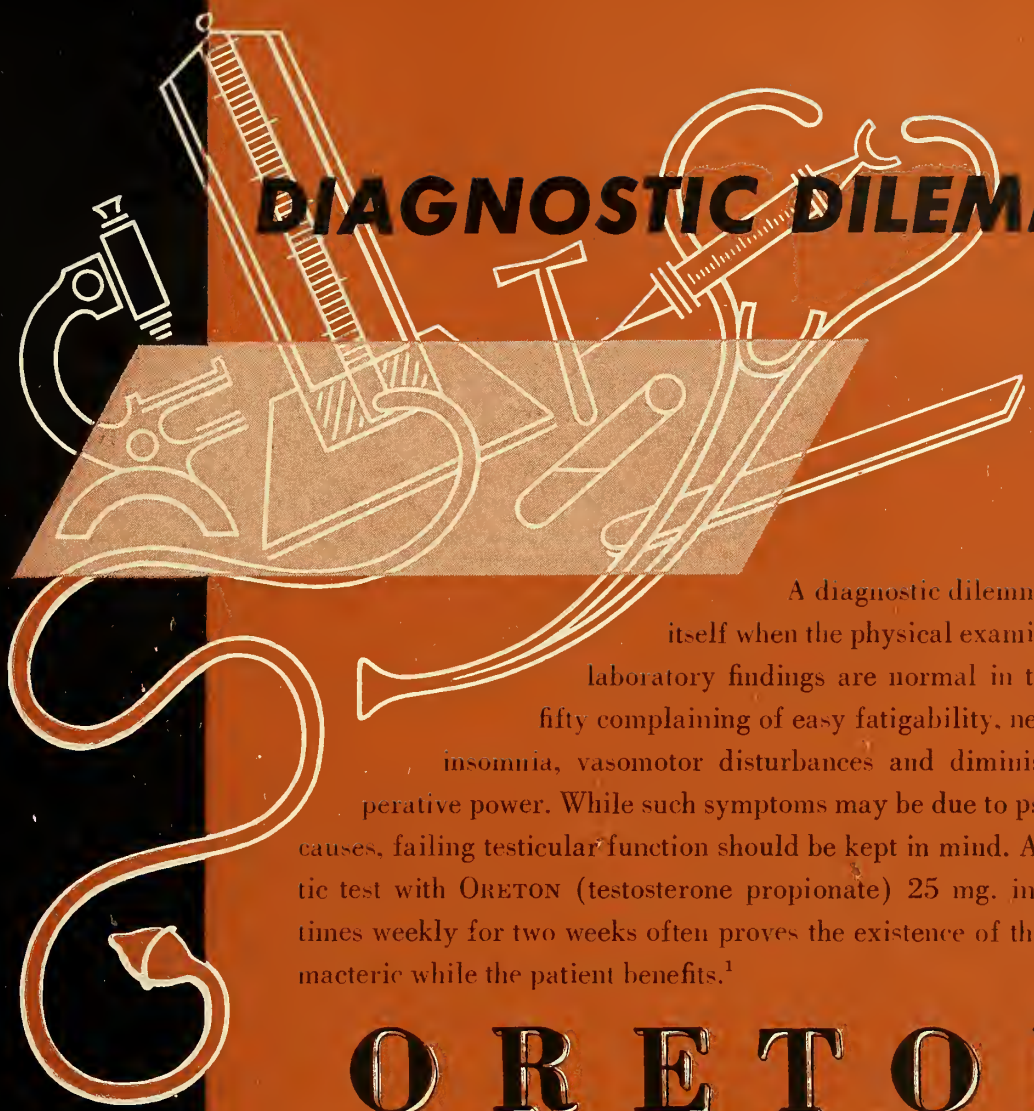
The doctors, who reported this study in the January 12 issue of *The Journal of the American Medical Association,* are: Commander W. B. Chew, Commander E. H. Berger, Captain O. A. Brines, and Captain M. J. Capron, of the United States Naval Reserve.

Of thirty-one military personnel patients suffering from wood alcohol poisoning and under the care of these doctors, five died within three hours after admission to the hospital. The rest recovered and were returned to duty. The authors felt that their success was due to the prompt elimination of acidosis, sometimes called acid intoxication.

Methyl alcohol poisoning usually results in blindness or death. The poison seems to have a selective effect on the optic nerve and retina of the eyes. The symptoms are usually delayed for nine to thirty-six hours, during which time an individual may continue to carry on. Suddenly weakness, headache, nausea, vomiting and collapse occur. If death does not come first, then the coma may last for several days before improvement occurs. Permanent blindness is then a frequent result.

PENICILLIN LOZENGES

Seventeen instances of glossitis and stomatitis due to penicillin lozenges and troches are reported in a study conducted at the Permanente Foundation Hospital. The lozenges had the following ingredients in common: Calcium penicillin, powdered sugar and calcium stearate. The most likely offending agent is calcium penicillin. The high incidence of such reactions (up to 18 per cent) with calcium penicillin lozenges makes their use in the treatment of infections of the oral cavity inadvisable.—*Permanente Foundation Medical Bulletin,* 4:21, 1946.



DIAGNOSTIC DILEMMA

A diagnostic dilemma presents itself when the physical examination and laboratory findings are normal in the man of fifty complaining of easy fatigability, nervousness, insomnia, vasomotor disturbances and diminished recuperative power. While such symptoms may be due to psychogenic causes, failing testicular function should be kept in mind. A therapeutic test with ORETON (testosterone propionate) 25 mg. injected five times weekly for two weeks often proves the existence of the male climacteric while the patient benefits.[1]

ORETON

ORETON, male sex hormone, is available in a variety of dosage forms: for intramuscular injection ORETON Ampules (testosterone propionate) of 5, 10 and 25 mg., in boxes of 3, 6 and 50 ampules; for oral use ORETON-M Tabets (methyl testosterone) 10 mg., in boxes of 15, 30 and 100 tablets; for inunction ORETON-M Ointment in 50 Gm. tubes; and for subcutaneous implantation ORETON-F Pellets (free testosterone) 75 mg., in boxes of 1 and 3 pellets.

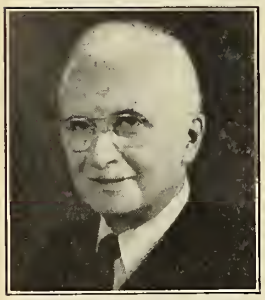
1. Heller, C. G., and Myers, G. B.: J.A.M.A. 126:472, 1944.

Trade-Marks ORETON, ORETON-F and ORETON-M—Reg. U. S. Pat. Off.

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Statewide Campaign for Foundation



EARL I. CARR, M.D.
President

A statewide campaign to interest donors of gifts to the Michigan Foundation for Medical and Health Education was inaugurated by The Council of the Michigan State Medical Society and by the members of the Foundation in October 1945.

The decision to seek contributions stemmed from the offer of A. S. Brunk, M.D., retiring President of the State Medical Society, who pledged to contribute $1,000 to the Michigan Foundation for Medical and Health Education if an additional $99,000 were pledged or contributed in one year's time by Doctors of Medicine and their lay friends.

The plan of the Board of Trustees of the Foundation included the creation of a "Foundation Sponsoring Committee," composed of the Presidents and Secretaries of Michigan's county medical societies plus the members of the MSMS House of Delegates. The function of this Committee is to solicit gifts of less than $1,000 for the Foundation.

In addition, the Councilors of the State Society were appointed to interest doctors of medicine and their lay friends to become "Founders" through the donation of gifts of $1,000 or more.

The sum of $55,650.00 has been contributed or pledged to the Michigan Foundation for Medical and Health Education in the seven months since the corporation was created. The officers and trustees of the Foundation are sanguine that Dr. Brunk's proposition can and will be fulfilled by September 25, 1946.

From September 18, 1945, to March 15, 1946

Allegan County Medical Society	$ 85
Anonymous, in Memory of his Mother	1,000
Regis V. Asselin, M.D., Detroit	5
R. H. Baribeau, M.D., Battle Creek	50.
Barry County Medical Society	50
M. G. Becker, M.D., Edmore	1,000
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85
C. D. Brooks, M.D., Detroit	1,000
J. D. Bruce, M.D., Ann Arbor	1,000
A. S. Brunk, M.D. Detroit	1,000
E. I. Carr, M.D., Lansing	1,000
L. G. Christian, M.D., Lansing	100
Clinton County Medical Society	50.
C. V. Costello, M.D., Holland	1,000
H. H. Cummings, M.D., Ann Arbor	1,000
A. C. Curtis, M.D., Ann Arbor	15
J. S. DeTar, M.D., Milan	1,000
Dickinson-Iron County Medical Society	80
Eaton County Medical Society	70
A. C. Furstenberg, M.D., Ann Arbor	1,000
L. J. Gariepy, M.D., Detroit	1,000
Genesee County Medical Society	1,000
Robert W. Gillman, M.D., Detroit	1,000
Grand Traverse-Leelanau-Benzie Co. Med. Soc	167.50
Gratiot-Isabella-Clare County Medical Society	125.
T. J. Heldt, M.D., Detroit	25.
Hillsdale County Medical Society	95
L. J. Hirschman, M.D., Detroit	1,000
L. E. Holly, M.D., Muskegon	1,000
Houghton-Baraga-Keewenaw Medical Society	140
R. J. Hubbell, M.D., Kalamazoo	1,000
Huron County Medical Society	55
Wm. A. Hyland, M.D., Grand Rapids	1,000
Ingham County Medical Society	572.50
S. W. Insley, M.D., Detroit	1,000
Jackson County Medical Society	350
Joint Committee on Health Education	1,000
Francis Jones, M.D., Lansing	1,000
F. H. Lashmet, M.D., Petoskey	100.
Lenawee County Medical Society	125
F. F. McMillan, M.D., Charlevoix	100.
Mason County Medical Society	35
Mecosta-Osceola-Lake Co. Med. Soc	45
H. A. Meinke, M.D., Hazel Park	50
Menominee County Medical Society	55
Michigan Medical Service	10,000
Mrs. K. B. Miner, Flint (in memory of F. B. Miner, M.D.)	1,000
H. L. Morris, M.D., Detroit	1,000
Muskegon County Medical Society	310
Cora B. Neal, Grand Rapids	1,000
Ontonagon County Medical Society	15
Wm. H. Parks, M.D., Petoskey	100.
A. W. Petersohn, M.D., Battle Creek	25.
Lawrence Reynolds, M.D., Detroit	1,000
J. M. Robb, M.D., Detroit	1,000
John Rodger, M.D., Bellaire	100.
St. Clair County Medical Society	220
G. B. Saltonstall, M.D., Charlevoix	1,000
E. F. Sladek, M.D., Traverse City	5,000
Ferris N. Smith, M.D., Grand Rapids	1,000
H. B. Steinbach, M.D., Detroit	100
R. H. Stevens, M.D., Detroit	1,000
C. L. Straith, M.D., Detroit	1,000
R. H. Strange, M.D., Mt. Pleasant	1,000
Jerrian VanDellen, M.D., East Jordan	100.
Ralph Wadley, M.D., Lansing	1,000
R. V. Walker, M.D., Detroit	1,000
H. L. Weitz, M.D., Traverse City	100
C. G. Wencke, M.D., Battle Creek	10
John O. Wetzel, M.D., Lansing	1,000
E. R. Witwer, M.D., Detroit	1,000
Margaret H. Zalen, M.D., Kalamazoo	5
	$55,648.81

(See page 446 for pledge card)

ESKADIAZINE

makes oral sulfadiazine therapy easier



ESKADIAZINE—the ideal oral sulfadiazine—has these three advantages:—

1 **Fluid Form.** This new fluid sulfadiazine is the ideal oral dosage form, especially for infants and children, and also for the many adults who object to tablet medication. Each 5 cc. (1 teaspoonful) contains 0.5 Gm. (7.7 gr.) of sulfadiazine.

2 **Exceptional Palatability.** Eskadiazine is so surprisingly palatable and pleasant in consistency that it is accepted willingly by all types of patients. Children actually like to take it.

3 **More Rapid Absorption.** The findings of a recent clinical study by Flippin and associates (Am. J. M. Sc., Aug. 1945) indicate that with Eskadiazine desired serum levels may be far more rapidly attained than with sulfadiazine administered in tablet form.

Smith, Kline & French Laboratories, Philadelphia, Pa.

S.K.F.'s new, outstandingly palatable fluid sulfadiazine for oral use

Association of Physicians with Cultists

The following statement of policy was adopted by the House of Delegates of the American Medical Association in June, 1938, and by the Michigan State Medical Society's House of Delegates in September, 1938:

Many inquiries concerning the relations of the various cults to the regular profession have been received. The inquiries pertain particularly to the osteopath and the optometrist. Some of our members are giving lectures in osteopathic and optometric schools and addresses before their societies. Some members are associated by a common waiting room in offices with them. Some members are by mutual agreement professional associates, principally in the field of surgery. There are some instances of partnership in practice. All of these voluntarily associated activities are unethical. Such relations certainly do not "uphold the dignity and honor of (our) profession" or "exalt its standards." In case of emergency no doctor should refuse a sufferer knowledge or skill which he possesses to the sufferer's harm but this is quite a different matter from that of a consultant or practitioner who by consulting or practicing with him assists a cultist to establish himself as competent and on the same basis of medical knowledge as a doctor of medicine. By the very nature of the education and training of each, a consultation with a cultist is a futile gesture if the cultist is assumed to have the same high grade of knowledge, training and experience as is possessed by the doctor of medicine. Such consultation lowers the honor and dignity of the profession in the same degree to which it elevates the honor and dignity of the irregular in training and practice. Practicing as a partner or otherwise has the same effect and objection. Teaching in cultist schools and addressing cultist societies is even more reprehensible, for such activities give public approval by the medical profession to a system of healing known to the profession to be substandard, incorrect and harmful to the people because of its deficiencies. There hardly can be a voluntary relationship between a doctor of medicine and a cultist which is ethical in character.

MICHIGAN FOUNDATION PLEDGE CARD

Name .....

Office Add..... City.....

Res. Add. ..... City.....

I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION
2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning September 19, 1945, the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
$	$	$

My contribution is

Please Check Your Choice [√]

(1) In Cash ☐ to be paid in the total sum ☐ or in annual payments of $.....

or **(2) In War or Victory Bonds** ☐ to be paid in the total sum ☐ or in annual payments of $.....

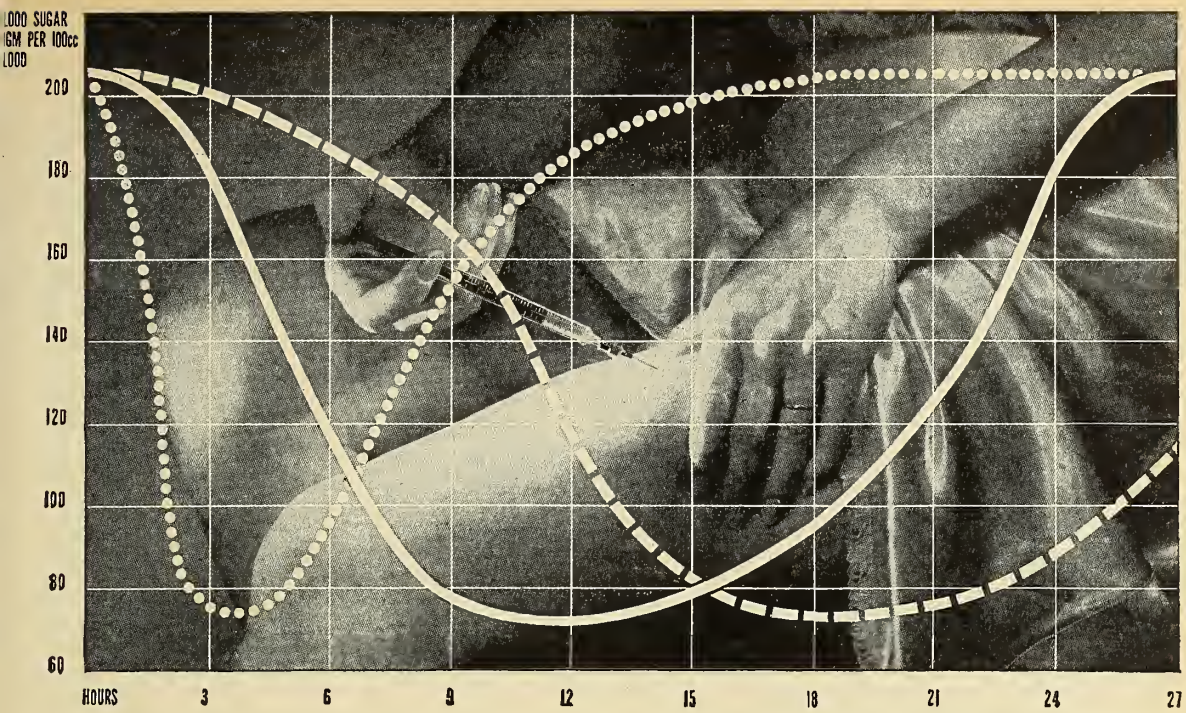
or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

.....

or **(5) In my Will** ☐

SIGNATURE .....



Today, there are 3 types of insulin...

THE PHYSICIAN now has a new intermediate-acting type of insulin with which to treat his diabetic patients—'Wellcome' Globin Insulin with Zinc. Originally there was only quick-acting, short-lived insulin. Then came a slow-acting, long-lived form. And now with Globin Insulin he has a moderately rapid-acting agent which persists for sixteen hours or more, enough to cover the period of maximum carbohydrate intake. This activity is sufficiently diminished by night to minimize nocturnal reactions. Physicians will do well to consider the advantages of this new third insulin for their diabetic patients.

'Wellcome' Globin Insulin with Zinc is a clear solution, comparable to regular insulin in its freedom from allergenic properties.

Accepted by the Council on Pharmacy and Chemistry, American Medical Association. Developed in the Wellcome Research Laboratories, Tuckahoe, New York. U.S. Patent No. 2,161,198. Available in vials of 10 cc., 80 units in 1 cc., and vials of 10 cc., 40 units in 1 cc. Literature on request. 'Wellcome' trademark registered.

'WELLCOME'
Globin Insulin
WITH ZINC

BURROUGHS WELLCOME & CO. (U. S. A.) INC., 9 & 11 EAST 41ST STREET, NEW YORK 17, N.Y.

You and Your Business

1946 MSMS ANNUAL SESSION IN DETROIT

The 81st Annual Session of the Michigan State Medical Society will be held at the Book-Cadillac Hotel, Detroit, on Wednesday, Thursday, Friday, September 25, 26, 27, 1946.

The House of Delegates will convene Sunday evening, September 22, and will meet also on Monday and Tuesday, September 23, 24.

For hotel reservations, write the Chairman, MSMS Housing Committee, 1005 Stroh Bldg., Detroit.

* * *

HEARINGS ON WAGNER-MURRAY PROPOSAL

The Senate is conducting hearings on S. 1606, the socialized medicine bill introduced into the Senate on November 19, 1945 by Senators Wagner and Murray and endorsed by President Truman on the same day.

The American Medical Association testified before the Senate Committee on Education and Labor on April 17. The Michigan State Medical Society, as well as the Conference of Presidents and Other Officers of State Medical Associations, has requested the privilege of sending witnesses to testify at the hearing.

* * *

VA HOME TOWN MEDICAL CARE

Over 3,600 doctors of medicine in Michigan have signified their willingness to render "home-town medical care" to Michigan veterans under the contract between the Veterans Administration and Michigan Medical Service.

Doctor, if you have not signed the card sent to you by the Michigan State Medical Society, execute it today so that you may be listed as a fee-designated physician, entitled to be compensated for the medical care you render to veterans with *service-connected disabilities.*

For detailed information on procedure in connection with the VA-MMS contract, write the Michigan State Medical Society, 2020 Olds Tower, Lansing 8.

* * *

COURSES IN MEDICAL ECONOMICS, MICHIGAN

President R. S. Morrish, M.D., Flint, and Secretary L. Fernald Foster, M.D., Bay City, have concluded a lecture course for the medical students of Wayne University College of Medicine on "Medical Economics." A similar series of lectures is being given at the University of Michigan Medical School, with JMSMS Editor, Wilfrid Haughey, M.D., Battle Creek, giving one of the talks. The lectures were arranged through the co-operation of the two medical schools and the Michigan State Medical Society.

Among Dr. Morrish's topics were medical societies and what they represent, their organization, advantages of membership, how to join, importance of medical meetings and of young men taking part, medical economics, and compliances with registration laws.

Dr. Foster discussed modern medical public relations, medical legislation and accomplishments of the medical profession along socio-economic lines.

Dr. Haughey spoke on Michigan Medical Service, Michigan's home-town medical care plan with the Veterans Administration, the advantages of rural and of urban medicine, and voluntary versus compulsory plans.

* * *

IOWA POLL OF MICHIGAN PHYSICIANS RE MICHIGAN MEDICAL SERVICE

Recently Arthur E. Perley, M.D., of Waterloo, Iowa, conducted a personal, unofficial poll of Michigan physicians concerning their attitude toward the medical service plan sponsored by the Michigan State Medical Society. One hundred physicians selected at random were questioned. There were sixty returns, of which eleven were blank, leaving forty-nine replies or approximately 50 per cent. The following is an analysis of the forty-nine replies:

1. Do you think the adoption of such a plan in each state will aid in preventing the passage of the Wagner-Murray-Dingell Bill? Yes, 81 per cent; No, 8 per cent; No opinion, 11 per cent.

2. Do you like the plan you now have? Is it successful? Yes, 87.7 per cent; No, 4.3 per cent; No opinion, 8 per cent.

3. Is there a definite demand for such a plan from the public, or unions, or is it from railroads and other big industrial concerns? Public, 73.4 per cent; Unions, 30.6 per cent; Industry, 26 per cent; All three, 8 per cent.

4. What is the attitude of physicians returning from military service in regard to the plan? Yes, 36.5 per cent, No, 2 per cent; no opinion, 61 per cent.

5. What are the abuses, if any, of your plan: (a) Do patients try to take unfair advantage of it? Yes, 20.4 per cent; No, 55 per cent; No opinion, 25 per cent. (b) Are there those being benefited who should not be included in it? Yes, 16.3 per cent; No. 45.3 per cent; No opinion, 18 per cent. (c) Are there any physicians who perform unnecessary operations or make unnnecessary operations or make unnecessary visits? Yes, 6 per cent; No, 47 per cent; No opinion, 22 per cent.

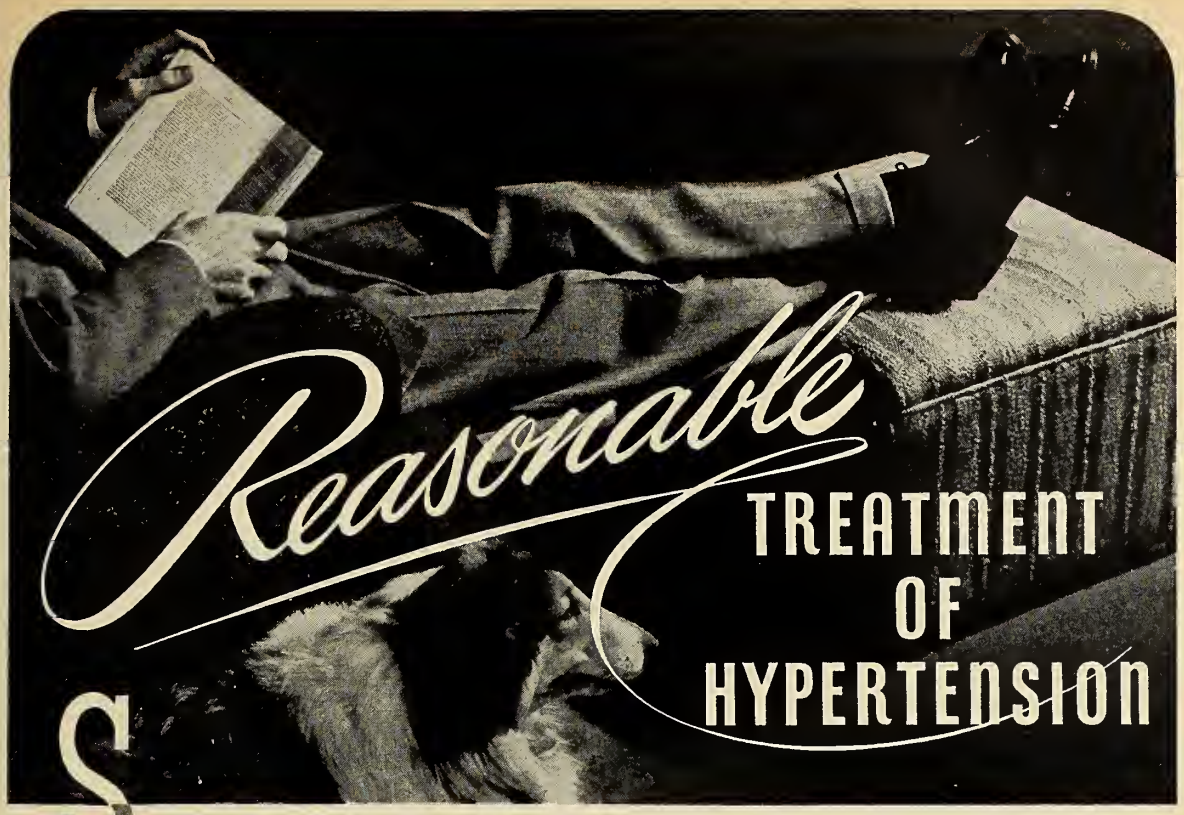
It is interesting to note that the great majority of those polled believe the plan would aid in preventing state medicine and that the great majority like the plan and thought it successful.

* * *

COMPLIMENTING THE DOCTOR

In a recent release from the Children's Bureau, U. S. Department of Labor, statistics were released showing the remarkable improvement in maternal and infant mortality for the United States during the past decade. This was the first comparative study of the nation's birth records over a period of ten years, according to Dr. Martha N. Eliot, Associate Chief of the Bureau, for

(Continued on Page 450)



Successful management of high blood pressure calls for a regimen which is adjusted to individual requirements. Physical activity is generally curtailed and overwork is avoided. In certain circumstances special diets are prescribed and the use of stimulants is restricted.

These measures are often supplemented with the administration of Theominal. This combined vasodilator and sedative aids in reducing blood pressure to a more normal level. As a consequence hypertensive symptoms are relieved and the risk of complications is reduced.

DOSAGE: The customary dose of Theominal is 1 tablet two or three times daily; when improvement sets in the dose may be reduced. Each tablet contains theobromine 5 grains and Luminal* ½ grain.

*Luminal (trademark), Winthrop Chemical Company, Inc., brand of phenobarbital.

WINTHROP **Theominal**
Reg. U. S. Pat. Off. & Canada

Supplied in bottles of 25, 100 and 500 tablets.

Winthrop CHEMICAL COMPANY INC.
Pharmaceuticals of merit for the physician
NEW YORK, N. Y.
WINDSOR, ONT.

COMPLIMENTING THE DOCTOR

(Continued from Page 448)

prior to 1933, data for such a comparative statistical review covering all of the states were not available.

In the ten-year period from 1933 to 1943, the birth rate rose 30 per cent, the infant mortality rate was reduced almost one-third while the maternal mortality rate was slashed more than one-half. "The infant mortality rate was reduced from fifty-eight to forty deaths per 1,000 live births, and in the same period the maternal mortality rate dropped from sixty-two to twenty-four deaths per 10,000 live births, a decline of 61 per cent."

According to Dr. Eliot, "The major credit for this remarkable record goes to the doctors, those in private practice and in public service, for the work they have done in their care of women during pregnancy, and the improved care they are able to give at childbirth, after delivery, and in the dangerous early days and months of the baby's life. Improvements in hospital care also come in for a large part of the credit."—Editorial, *Illinois Medical Journal*, January, 1946.

* * *

NEW PROGRAM TO TRAIN OCCUPATIONAL THERAPISTS

A program for the training of occupational therapists, recently inaugurated at Wayne University, has gotten into full swing with the arrival on campus this semester of Barbara Jewett, assistant professor of occupational therapy, who now is in charge of the professional training of these specialists. The new program, Wayne University officials point out, is an especially important one because of its relationship to the rehabilitation of disabled veterans. The need for skilled occupational therapists, however, is expected to continue indefinitely in postwar years.

Miss Jewett comes to Wayne University with an extensive background of training and experience in occupational therapy. She received her professional degree from the Boston School of Occupational Therapy, which is affiliated with Tufts Medical School. Previously she had been active in educational work as a teacher following graduation from Indiana State Teachers College. After extensive therapy work with crippled children, Miss Jewett organized, and was head of, the department of occupational therapy at the University of Kansas. During the war Professor Jewett was in charge of this work at Schick Veterans Hospital, Clinton, Iowa.

Utilizing the facilities of the medical, education, and liberal arts colleges, the program in occupational therapy at Wayne leads to a bachelor of science degree. In addition to the academic work there is approximately nine months of clinical practice required, for which arrangements have been made with Herman Kiefer, Harper, Children's, and Grace Hospitals in Detroit; the Detroit Orthopedic Clinic; the Maybury Tuberculosis Sanitarium at Northville; the Ypsilanti State Hospital; and Seymour hospital at Eloise.

The institutional and community resources available for training in this area afford exceptional opportunities for students desiring to enter this field, according to Miss Jewett. Graduates will be qualified for positions in hospitals, clinics, sanitariums, institutions for the mentally ill, and schools for handicapped children and home-bound cripples.

Support for the program at Wayne is given by the Michigan Society for Crippled Children and through a co-operative plan with the Detroit Orthopedic Clinic. Tentative approval has been given the curriculum by the American Occupational Therapy Association and the American Medical Association. Final approval by these organizations must, according to practice, await graduation of the first class.

* * *

FURTHER ANALYSIS OF S. 1606

Title I, Part A provides (a) that Congress shall appropriate each fiscal year a sum sufficient to assist the states in developing effective measures for the prevention, treatment and control of veneral diseases; and (b) that the sum of $10,000,000 be appropriated each fiscal year for the purpose of assisting the states in prevention, treatment and control of tuberculosis.

Authority already exists for Congress to appropriate money for these purposes under Section 601, Title VI of the Social Security Act (Public Law, Title 42, Section 246). In the annual Public Health Report for 1944 it is stated that payments to the states for general health work under Title VI of the Social Security Act totaled $10,000,000 and in addition, for the control of the venereal diseases, 9,700,000. Legislation approved July 1, 1944 (Public Law, Title 42, Section 246 (b)) made available to the Public Health Bureau an appropriation of $10,000,000 for the fiscal year of 1945 for tuberculosis control. Therefore these two sections of the Wagner Bill contribute nothing new.

Part C of the bill, providing for grants to states for medical care of needy persons, is the only really new material of Title I. All the other sections might be said to have been used as window dressing for Title II. A bill drafted without these preliminary sections would be far less attractive and would not be likely to gather much public support.—Council on Medical Service and Public Relations, Washington office.

* * *

NATIONAL HEALTH INSURANCE IN ENGLAND

National Health Insurance has existed in England since 1911, when it was passed under the sponsorship of the premier, Lloyd George. It met with much opposition from the medical profession, and there were many doctors who refused to take a panel. Wherever the system threatened to fail because of professional opposition, the government placed young medical graduates in the locality. This was not difficult, because in England a doctor must buy a practice when he starts, and there were many young graduates who grasped the chance to acquire a practice, even a panel one, without having to pay the regular charge of $12,000 to $40,000.

National Health Insurance includes every wage earner, male or female, married or single, between the ages of

(Continued on Page 452)



...for BABY

• We had your young patients in mind . . . the infant on a formula and the child who has difficulty taking capsules or tablets . . . when we developed these readily soluble, palatable *granules* of VITAMIN B COMPLEX—a preparation which lends itself to flexibility of dosage as required in pediatric practice.

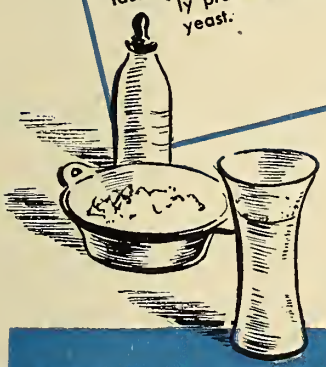
• "BEMINAL" Granules may be added to the baby's formula, sprinkled on cereal, or dissolved in fruit juices, milk or any other liquid. Older children may prefer to take them dry.

Available in bottles of 4 ounces.

Each heaping teaspoonful (4 Gm.) contains:

Thiamin Chloride	3.3 mg.
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Pyridoxine HCl	0.2 mg.
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Together with other factors of the vitamin B complex as found in 165 mg. of specially processed brewer's yeast.



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NATIONAL HEALTH INSURANCE IN ENGLAND

(Continued from Page 450)

14 and 64 with an income less than 420 pounds, ($1,680). The fees are deducted automatically from the pay check, therefore it is compulsory.

When the insured is unemployed the state pays the insurance, *provided he is on the dole.* At age sixty-four he stops payment and is insured for life, and receives the old age pension. Persons who do not receive their payment in the form of a wage must pay separately every quarter.

The 420-pound limit means 90 per cent of England is included.

A successful, busy practitioner can handle a panel of 2,000. (The upper limit fixed by law is 2,500.) A panel of 2,000 yields a yearly income of somewhat over 1,000 pounds ($4,000). This may be increased by issuing "certificates of disability" to the small percentage who cannot work at one shilling each. With a panel of 2,000 the doctor sees about thirty patients a day so that his pay is about two shillings for an office or house call. This takes the doctor from 9:00 a.m. to 8:00 p.m.

Inspectors come around regularly to inspect the doctor's records. If they fail to pass, a fine of 100 to 200 pounds is assessed without further process. According to the law the doctor may do for his patient only what is within the province of the general practitioner, and he must prescribe from a group of inexpensive drugs, subject to a fine, which may be as high as 1,000 pounds. If a patients needs an operation he is sent to a hospital where only a recognized person with specialized training may operate. The fee for an appendectomy nets one pound.

The wage earner's dependents have to be provided for through a Public Medical Society, or club, which hires an accountant, collectors and typists. The average number of persons assigned to a doctor is 1,000 at four pence a week.

When the state operates the system as the panels the doctor gets 12.5 per cent of the money taken in, the balance going to administration, but these Public Medical Societies are operated by the doctors themselves and 80 per cent goes to the doctors, 12.5 per cent to the collectors and 7.5 per cent to the accountant. By having 1,000 club patients the doctor gains about 660 pounds a year. These are mainly women and children, and while only half the number of the regular panel they account for thirty calls a day. If the doctor can also see ten private patients a day he may add four to five hundred pounds a year to his income, making a total of 2,000 ($8,000).—Extracted from a reprint from the *J.A.M.A.*, 130:226 and 227, (Jan. 26) 1946.

* * *

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

General oral and pathological examinations (Part II) for all candidates will be conducted at Chicago by the entire Board, Monday, May 6, through Saturday, May 11, 1946, at the Palmer House. Formal notice of the exact time of each candidate's examination will be sent him well in advance.

Candidates for re-examination in Part II must make written application to the Secretary's office by April 15, 1946. Deferments without time penalty under a waiver of published regulations applying to civilian candidates will be granted if a candidate in service finds it impossible to proceed with the examination of the Board.

Candidates in military service should keep the Secretary's office informed of any change of address.

Applications are now being received for the 1947 examinations. For further information address Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

* * *

NEW EMIC INFORMATION

As of October, 1945, new regulations are in effect in the Emergency Maternity Care program, and the doctors were not consulted in their promulgation. This is undoubtedly a preview of what is in store if the Pepper Bill passes.

Under the Emergency Maternity and Infant Care Program a wife is eligible for care received after the induction of her husband regardless of her husband's status at the time of application if at any time during her pregnancy the husband was in one of the four lowest pay grades or an aviation cadet. An infant under one year of age is eligible for care, regardless of the father's status at the time of application, if at any time during the infant's prenatal period or first year of life the father was in one of the four lowest pay grades or an aviation cadet. Exception: Applications made after *dishonorable* discharge of the husband or father cannot be approved.

Medical maternity care includes care during the prenatal period, delivery and postnatal period; care of obstetrical complications; and care of the newborn infant during the first two weeks of life. (including circumcision if done during the first two weeks).

Hospital maternity care includes ten days' care at the time of delivery and any other necessary hospital care because of obstetrical complications during the prenatal or postnatal period.

Nursing care in case of serious complications are also included together with care of intercurrent non-obstetric complications, during pregnancy and the six week puerperium, as home and office calls for pneumonia or such complications or operations by qualified surgeons.

Medical, hospital and nursing care for the infant under one year and immunization against whooping cough, diphtheria and smallpox.

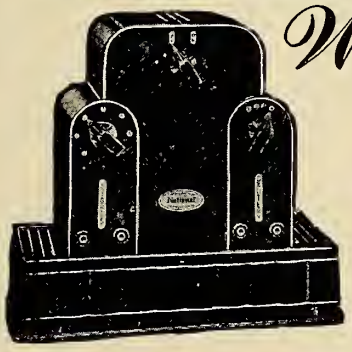
The physician must properly and completely fill out the application blank and verify the status of the husband.

Fees to the attending physician are for complete maternity care, $50.00. That includes all medical obstetric services from the effective date of authorization until approximately six weeks after delivery. If rendered under separate services the prenatal care must be at least five visits at $3.00 per visit, but not to exceed $15.00. Delivery, care of the infant for two weeks including cir-

(Continued on Page 454)

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We Recommend "National"

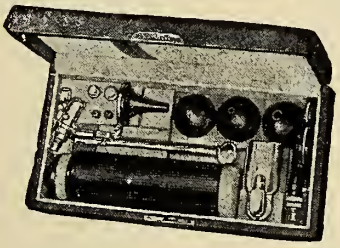


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NEW EMIC INFORMATION

(Continued from Page 452)

cumcision, if done, $30.00. Postpartum examination $5.00. No other payments may be made to the physician for care of the patient if she develops obstetric complications. All obstetric or surgical service by the attending physician is included in the basic fee.

A consultant may be paid $50.00 for major surgery. This pamphlet is available from the Michigan Department of Health, and one should be obtained if EMIC work is done. The rates are ridiculous.

* * *

S. J. RES. 137

In the Senate of the United States on January 29 (legislative day, January 18), 1946, Mr. Morse introduced the following joint resolution, which was read twice and referred to the Committee on Education and Labor.

Joint Resolution

To authorize the Secretary of Labor to make certain studies of the health of school children, and for other purposes.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Labor, acting through the Children's Bureau of the Department of Labor, is authorized, in co-operation with Federal, State, and local agencies and qualified institutions of higher education, (1) to make studies of the health and physical status of children of school ages; (2) to make studies of the facilities and services offered by schools for the correction of physical defects of children of school ages; and (3) to recommend the use of, and to demonstrate in representative urban and rural areas, methods of conducting school health examinations and providing school health services.

Sec. 2. For the purpose of defraying the expenses of the Department of Labor in carrying out the provisions of this joint resolution and providing funds for direct grants by the Secretary of Labor to State departments of health, State departments of education, and qualified institutions of higher learning, co-operating with him in carrying out the provisions of this joint resolution, there is hereby authorized to be appropriated, out of any money in the Treasury not otherwise appropriated, $100,000 for the fiscal year ending June 30, 1946, $450,000 for the fiscal year ending June 30, 1947, and $450,000 for the fiscal year ending June 30, 1948.

Editor's Note.—This Joint Resolution is published in full to ask a question of our thinking members. Is this another opening wedge to place the department of labor in the practice of medicine the same as EMIC?

INCREASED AID TO COUNTY HEALTH DEPARTMENTS

County and district health departments, exclusive of cities, expend approximately $1,800,000 per year in the maintenance of public health services. Of this amount, $392,433 is provided by the federal government, $862,000 by boards of supervisors, $400,000 by private agencies and only $185,000 is provided by the state.

Private funds will eventually be withdrawn and there is a possibility that federal funds might be sharply curtailed. The state government will have to increase its contributions to absorb this possible reduction of approximately $800,000 in federal and private funds. The $185,000 at present allotted by the state provides assistance to forty-five county departments of health that are already established.

BLUE CROSS PLANS FALLING OFF?

Wagner, Murray, Dingell and Truman as well as labor, the spokesman at the Conference on Medical Services in Chicago February 10, 1946, have all mentioned voluntary service plans, and passed them off with the statement that they are inadequate, and after all their registration is falling off, and we cannot wait for them to cover the nation. The facts are that the Blue Cross had one million members in 1937, five million in 1940, ten million in 1942, fifteen million in 1944 and twenty million in 1945. That does not show falling off, but a doubling in three years.

SOCIAL SECURITY THE AMERICAN WAY

The Insurance Economic Society of America published a reprint of an article in the Savings Bank *Journal*, November, 1945. It says the American people have built up a backlog of savings as follows:

Savings (Cash, time deposits, U. S. Bonds, demand deposits)	$146,000,000,000
Real estate	40,000,000,000
Share holders (Stocks, etc.)	40,000,000,000
Life Insurance (present value)	35,000,000,000
Total	$251,000,000,000

Estimated National wealth in 1938 was.....$309,000,000

They estimated that at the end of 1944 more than 40,000,000 persons were covered by health and accident insurance. In 1920 this was 8,000,000 and in 1934 it was 8,000,000.

It was also estimated that at least four or five million people have some protection against the unexpected costs of medical care through Industrial plans, 47 per cent; Medical Society plans, 28 per cent; Private group clinics, 15 per cent; Government plans, 7 per cent; Consumer-sponsored plans, 5 per cent and others, 2 per cent.

NEED FOR MEDICAL BOOKS IN MANILA

The Academy International of Medicine and Dentistry, Liberty Building, Topeka, Kansas, is attempting to supply the destroyed library of the University of Manila with sufficient books to enable the school to operate. The Japanese destroyed the university and its equipment until no piece of usable equipment remains. Doctors are invited to donate books that may be sent to Manila. Many have already been sent. In an effort to avoid duplication and to send material that is critically needed, all gifts should be cleared through the Academy in Topeka. If the donor would rather give cash, arrangements have been made to purchase books at cost, and the check should be made to the University of the Philippines, School of Medicine, Manila Library Fund.



THYROBROM,* a brominated thyroid in tablet form, provides every pharmacological action afforded by thyroid U.S.P., with a minimum of toxic effects that ordinarily attend the administration of plain thyroid.

The therapeutic effectiveness of THYROBROM, and proof of its clinical advantages, are set forth in a recently published paper reporting a controlled study of 60 obese cases.[1] Administered in the same dosage as thyroid U.S.P., THYROBROM proved to be:

- **15% more effective in raising B.M.R.**
- **35% more effective in reducing weight**
- **64% less causative of palpitation and nervousness than thyroid U.S.P.**

Each THYROBROM tablet contains ***brominated*** thyroid 2 gr., made from the finest grade of clean, fat-free, desiccated whole thyroid. THYROBROM'S iodine content, 0.2%, equals the U.S.P. standard for thyroid.

THYROBROM may be prescribed in hypothyroid obesity or in any indication for thyroid U.S.P. It may be tried in cases in which thyroid U.S.P. is not well tolerated.

ADMINISTRATION: Adults—½ to 1 tablet (1 to 2 gr.) daily, preferably given in the morning. Dosage may be gradually increased to meet individual requirements, but should seldom exceed 4 gr. per day. Discontinue if untoward symptoms arise. Therapy should be controlled by periodic examination. Any thyroid preparation is contraindicated in cardiac disease, adrenal cortex insufficiency, hypertension, diabetes and hypothyroidism secondary to pituitary dysfunctions.

HOW SUPPLIED: Bottles of 30 tablets, grooved for easy division.

Limited to Prescription Use

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[1] *M. Rec.* 158:420, 1945

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ARMY-NAVY MEDICAL PROCUREMENT AGENCY SETUP

In order to assure the interchangeability of medical equipment between the two services and to unify purchases of medical supplies, an Army-Navy Medical Procurement Agency has been set up and is now in operation in New York City.

The agency is the outgrowth of a study of the feasibility of unifying all Army-Navy procurement made during the war by Colonel (later Brigadier General) William H. Draper, AUS, and Captain (later Rear Admiral) Lewis L. Strauss, USNR, at the instruction of the Secretary of War and the Secretary of the Navy.

The buying policies under which the agency operates will be determined by a board of four officers, two from each service, and will be under supervision of the Army-Navy Munitions Board. A single laboratory has been set up for testing.

A supply list has been compiled of medical supplies used by both services, arranged so as to permit easier identification of supplies used by either service. Exchange of any surplus which may occur is facilitated and relief from temporary shortage of a specific material may be obtained by checking with the other service.

As a result of standardization, about 85 per cent of the 3,000 items regularly stocked by the Army have been found susceptible to use by the Navy. In some cases Navy specifications will be changed to conform to the Army's and in others the Army's will conform to the Navy's. Certain items, such as operating room equipment for use on board ship, are peculiar to the Navy, while veterinary supplies are peculiar to the Army.

* * *

GENERAL KIRK OUTLINES THE REMAINING TASK

The care of the war's wounded is only a part of the medical responsibility of the Army Medical Department, with five thousand neuropsychiatric patients, one thousand tropical disease patients, and three hundred blinded soldiers still in Army hospitals, Major General Norman T. Kirk, Surgeon General of the Army, said in a recent talk at the annual dinner of the Society of Surgeons of New Jersey.

"In the nine centers specializing in hand and plastic surgery, there are 11,500 patients needing an estimated 31,000 operations," General Kirk pointed out. "The plastic surgeons who had been working twelve to fourteen hours daily, six days a week, to carry this load were most of them eligible for separation on points. It was necessary to freeze them in the service. I explained to them why we had to do it. They understood, and they are still doing their job.

"Wherever American soldiers are on duty anywhere in the world, there must be medical officers with them. The flow of battle casualties has mercifully ended. But young men are still subject to all the usual diseases, from colds in the head to acute appendicitis. They are still subject to accidents . . . they still must be protected against tropical disease. They still must be protected from the diseases born of wartime devastation and malnutrition. They still must be looked after at staging areas and on their way home. They still must be examined most thoroughly at separation centers, both for their own sakes and for the sakes of the taxpayers who will later foot the bill for errors, as well as for genuine disabilities. Those who will replace them at home and overseas must still be examined at induction centers. Prisoners of war must still be cared for. Displaced persons are frequently medical problems before they are anything else."

In 1940, just after the fall of France, the General said, the United States Army consisted of approximately 250,000 men and the Medical Corps of about 1,600 officers, of whom nearly 75 per cent were in the Regular Army. By December 7, 1941, there were 1,613,000 men in the Army and 11,390 officers in the Medical Corps. Although the increment in the Army was chiefly through the Selective Service, that of the Medical Corps consisted entirely of volunteers.

"In short, the Medical Corps can no more be permitted to fall apart, to 'demobilize by demoralization,' than can the rest of the Army," General Kirk concluded. "The hardship to be borne by men who must remain in uniform longer than they like is simply an essential part of what has gone before. It cannot be evaded without placing in jeopardy the victory won in combat. It is indispensable to the completion of the job."

* * *

SN-7618 EFFECTIVE ANTI-MALARIAL DRUG

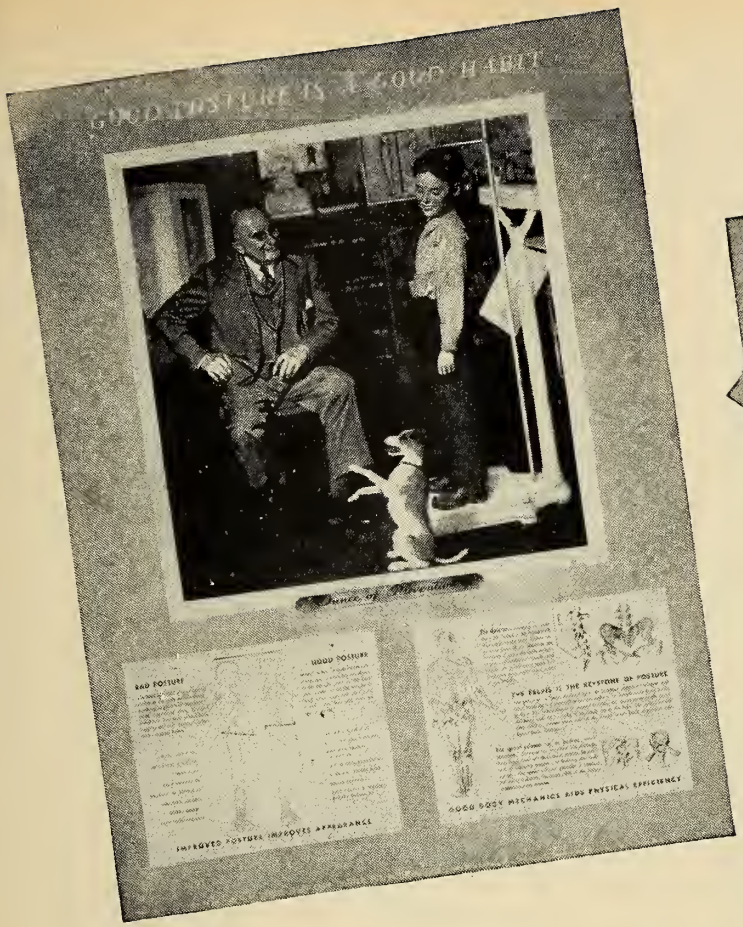
The new anti-malarial drug, SN-7618, which the Army Medical Department played an important part in developing, has been found to be superior in many ways to quinine or atabrine, according to a recent announcement by the Office of The Surgeon General.

Studied in collaboration with the Interservice Board for the Co-ordination of Malarial Studies, SN-7618 was tested in experiments at Harmon General Hospital, Longview, Texas, and Moore General Hospital at Swannanoa, North Carolina, in addition to some overseas theaters of operations.

Designed to obtain information on the value of the drug in controlling the symptoms and fever occurring in acute attacks of malaria, these studies included the observation of more than 600 malaria-stricken soldiers, who were administered different amounts of the drug in from one to seven days. When notations had been made of symptoms such as the passing of the fever and the disappearance of malarial parasites from the blood stream, the patients were kept in the reconditioning section to determine the possibilities and time interval for relapse.

Comparisons were made of the results with those obtained in similar studies of atabrine, quinine and other

(Continued on Page 458)



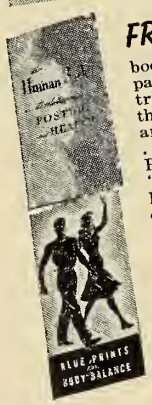
FULL COLOR HUMAN INTEREST GOOD POSTURE CHART expressly designed for physicians' offices, clinics and health centers. One of four in the new 1946 group added to the standard series widely distributed in schools, colleges, industrial plants, "Y's" and similar outlets. Write for your office copy of this educational chart on your professional letterhead. Samuel Higby Camp Institute for Better Posture, Empire State Building, New York 1, N. Y.

May 6 to 11 CAMP *8th Annual* NATIONAL POSTURE WEEK

Once again National Posture Week takes its place on the calendar of public health education as it dramatizes the sound and ethical year-round program focusing the attention of the country on the significance of good posture as one element in good health and physical fitness.

Since no field is more subject to the dangers of "glamorizing" and lay "experting," the Institute in all its appeals stresses the necessity of "seeing your physician" as the first step in the improvement of poor body mechanics. Distribution of authentic literature through schools, colleges, medical and government bodies; and industrial, professional and civic public health groups is an important part of the program. Press and radio give serious coverage.

We hope to merit the continued cooperation of the medical profession during the first post-war observance of National Posture Week as peace presents its varied problems to those charged with maintaining the health of the nation.



FREE: These two heavily illustrated booklets on posture prepared especially for distribution by physicians to their patients. Their titles are: "The Human Back . . . its relationship to Posture and Health" and "Blue Prints for Body Balance." Ask for the quantity you need on your professional letterhead. THE SAMUEL HIGBY CAMP INSTITUTE FOR BETTER POSTURE, Empire State Bldg., New York 1, N. Y. Founded by S. H. Camp & Company, Jackson, Mich.

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SN-7618 EFFECTIVE ANTI-MALARIAL DRUG

(Continued from Page 456)

new drugs. It was found that one day's treatment with SN-7618 promptly controlled fever and other symptoms and that the parasites rapidly disappeared from the blood.

* * *

COMMITTEE INVESTIGATING JAPANESE MEDICAL SCIENCES MAKES FINAL REPORT

The final report of the Committee for the Technical and Scientific Investigation of Japanese Activities in The Medical Sciences has been received by the Army Medical Library, according to a recent announcement.

Established in Manila by the office of the Chief Surgeon, the Committee visited every city of importance in medical education and every first-class medical institution in Japan, during a three-month period.

They were unable to examine and properly evaluate all of the many claims of scientific interest made by the Japanese. Some of these claims were not accepted as factual, but were considered of interest and reported. The material examined included Literature and information concerning all sorts of medical activity over the past twenty years.

* * *

COLLEGE OF MEDICINE DECELERATES PROGRAM

Wartime acceleration of instruction at the Wayne University College of Medicine is to be abandoned as rapidly as possible in favor of a return to the normal peacetime program.

A change was indicated, when the military recently canceled its wartime contracts with the College of Medicine for the training of physicians and surgeons.

The deceleration of the program is to be made complete with the close of the 1946-47 academic year. The first break from the accelerated schedule will occur when the current semester closes at the end of March.

The period from April 1 through June 30 will be devoted exclusively to refresher and graduate programs for returning veterans. Undergraduate instruction will resume during June. During the academic year 1946-47 work will be adjusted so that the year will terminate simultaneously with that in other colleges and schools in the University.

* * *

VETERANS ADMINISTRATION STATE CONTACT OFFICES

(Continued from Page 426)

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Veterans Administration
Room 321, Post Office Building
Bay City, Michigan
Phone: 2-4521

Pontiac
Mr. Arthur A. Voorhees, Contact Representative
Veterans Administration
901-902 Peoples State Building
Pontiac, Michigan
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Mr. Ben Bearstein, Contact Representative
Veterans Administration
U. S. Naval Armory
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Veterans Administration
Kalamazoo Ice & Fuel Company Building
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Mr. Robert Grinnel, Contact Representative
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Park Hotel Building
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Port Huron
Mr. Raymond H. Taylor, Contact Representative
Veterans Administration
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Port Huron, Michigan

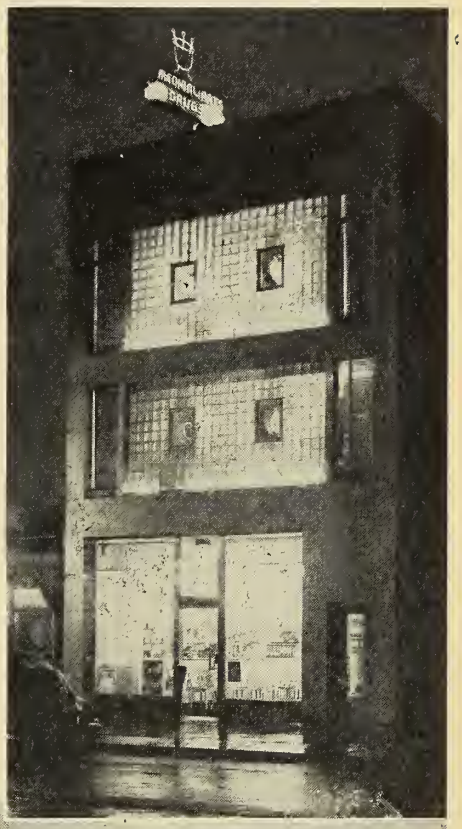
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Editorial Comment

WELCOME HOME, DOCTOR

Doctors who served in the war are coming home in considerable numbers now, and in many communities you can hear sighs of relief plus the frequent remark: "Well, thank heaven, I can get sick now." Welcome-home editorials are appearing in local newspapers as favorite physicians return; testimonial dinners are being thrown profusely; the medical veterans are being invited to address Rotary, Kiwanis, et cetera, luncheons; and all this and that.

It's all very nice, and no doubt the doctors are pleased. We think, however, that we have an idea for a welcome-home program which any community can stage, and which should be of substantial benefit to the doctors so welcomed.

In honor of each physician who comes back from the wars, how about a Pay The Guy What You Owed Him When He Left If You Owed Him Anything movement?

Most doctors are poor bill collectors. Many people let the doctor's bills go till the last. Many others just nonchalantly forget about the doctor's bills—and squawk fiercely if he squawks at all. It all adds up to the fact that on practically every doctor's books are large amounts in unpaid bills. He could very conveniently use that money after several years in service on modest service pay.

No bands, luncheons, reception committees, et cetera, are needed for this Pay The Guy, et cetera, movement. All that is required is a mass migration to the mailboxes by doctors' debtors with envelopes containing checks or money orders in their hands. The ceremony is guaranteed to make the debtor as well as the doctor feel better.—*Collier's*, March 15, 1946.

HEARINGS ON WAGNER-MURRAY-DINGELL BILL ANNOUNCED

The Senate Committee on Education and Labor announced that it would begin hearings on S. 1606, the latest Wagner-Murray Bill on March 18.* This was a tentative date. Senator Wagner is ill and Senator Murray is in the West just now, so permanent arrangement of a calendar of hearings cannot be made until Senator Murray returns. The first witnesses to be invited to testify are likely to be representatives of Government bureaus. Our latest information is that medical witnesses will probably be heard during the third week of the hearings.

*This was changed to April 2.

The members of the Senate Committee on Education and Labor are:

Democrats—James E. Murray, Montana, Chairman; David I. Walsh, Massachusetts; Elbert D. Thomas, Utah; Claude Pepper, Florida; Allen J. Ellender, Louisiana; Lister Hill, Alabama; Dennis Chavez, New Mexico; James M. Tunnell, Delaware; Joseph F. Guffey, Pennsylvania; Olin D. Johnston, South Carolina; J. W. Fulbright, Arkansas.

Republicans—Robert A. Taft, Ohio; George D. Aiken, Vermont; Joseph H. Ball, Minnesota; H. Alexander Smith, New Jersey; Wayne Morse, Oregon; Forrest C. Donnell, Missouri.

Progressive—Robert M. LaFollette, Jr., Wisconsin.

COMPULSORY HEALTH INSURANCE

There have been two rather interesting developments in the program of compulsory health insurance as outlined by President Truman in his last message to the Congress, one of which has to do with the reaction of the members of Congress to this proposal. A very recent newspaper article indicated that the vote in the Congress was in the ratio of seven to four against compulsory health insurance, approximately one-third of the members of Congress having been contacted in this poll. However, the observer would note in reading this particular despatch from Washington, that the majority of the members of Congress who spoke against compulsory health were members of the Republican party and naturally they could be expected to be antagonistic to any proposal of the Democratic president. *It is earnestly to be hoped that physicians in this country will not be deceived by this report and relax their efforts to combat state medicine.* After all, the Republicans are much in the minority and the figures given probably do not represent the actual voting strength of those who have to make the decision when compulsory health insurance, probably in the form of the Wagner-Murray-Dingell Bill, is presented to Congress. We still should continue wholeheartedly and with all our effort to let our Congressmen know how we as doctors feel about compulsory health insurance and fight this measure to the limit of our ability.

A second poll, called the poll of experts, has been published in the American Magazine. These experts voted sixty to forty in favor of compulsory health insurance. Here again a distorted picture is presented by the poll because, of the so-called experts, a large number consist of men who have been active proponents of compulsory health insurance. Truly it might be said that sixty to forty voting represented a very favorable opinion against the ideas of having a compulsory health system with all the demerits that the plan calls for, because, as was said before, these experts represent to a very large extent a group who would be expected to vote in favor of com-

(Continued on Page 462)

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1. Strakosch, E. A. and Clark, W. G.: Minn. Med., *26*:276-282 (March) 1943.
2. Tsuchiya, H. M., et al.: Proc. Soc. Exper. Biol. and Med., *50*:262-266 (June) 1942.

COMPULSORY HEALTH INSURANCE

(Continued from Page 460)

pulsory health insurance. It should be noted that the members of Congress or those who are classified as "experts" are almost entirely in favor of medical care to people at a price that they can afford to pay but most physicians agree that voluntary methods can take care of medical service to the lower income group and they will not have the inefficient and extravagant bureaucratic administration that can be counted upon if health insurance is made obligator and compulsory by an Act of Congress for all wage earners.—Editorial, *New Orleans Medical and Surgical Journal,* February 1946.

WHO ARE THE BACKGROUND AGENTS OR AGENCIES SPONSORING THE WAGNER AND AND SIMILAR BILLS?

Since Senators Wagner and Murray have become such prominent protagonists of their theories—(a polite term for some of their promulgations)—it should be evident that they must have had behind them or have been associated with advisers, understudies or assistants who gave them the material they have seen proper to incorporate in drafts of legislation espoused by them.

If so, in turn, the query may be put: "Who are some of the persons, groups or organizations that have given or suggested to Senator Wagner of New York, Senator Murray of Montana, and Congressman Dingell of Detroit, the information and material contained in the drafts of their respective bills?

On this point, the *Journal of the American Medical Association*—(J.A.M.A., Dec. 1, 1945, p. 951) states:

"According to Arthur Sears Henning, 'the compulsory health insurance plan is chiefly the brainchild of Isidore S. Falk, research director of the Social Security Board, and Michael M. Davis, a member of the CIO Political Action Committee.' "

An interesting article in *Medical Economics* (November, 1945, p. 36) refers to:

"A 'master plan' of the International Labour Organization for socializing medicine in all countries of the world. No pipe-dream, this plan is already responsible for the establishment of state medicine in Chile and in New Zealand! Still more significant—though not generally known—is the fact that the Wagner-Murray-Dingell Bill in this country was written largely by ILO (International Labor Organization) leaders and that those same leaders are a powerful element in the current campaign for its passage."

From the same article:

"What Americans serve among these experts? For medical planning, there are at least three (none of them physicians): Arthur J. Altmeyer, chairman of the United States Social Security Board; Isidore S. Falk, director of the SSB's Bureau of Research and Statistics; and Wilbur Cohen, its assistant director."

Also, from this article, another paragraph, with an illuminating footnote:

"Of particular significance to the medical and allied professions is the International Labour Conference held in Philadelphia in 1944. At that session delegates* adopted a medical care recommendation embracing 114 detailed proposals to guide the member states in developing their health services. A majority of the 114 proposals are embodied directly or by implication in the Wagner-Murray-Dingell bill of 1945 (S. 1050)."

* * *

Physicians should give the President's Message and S. 1606 Careful Thought.—It is important that physicians keep in mind the background activities above referred to, since, if as stated, outside lay forces are the insidious or other promoters of the persistent propagandist campaigns on the desirability of having the United States legally adopt "Compulsory Health Insurance" (Compulsory Sickness Insurance) it follows that Doctors of Medicine practicing in the United States should immediately and collectively become aware of that important fact!

Otherwise, as in recent years, hundreds of thousands of Americans will continue to be misled through the unsound philosophies and misinformation so insistently put forward by the proponents of a regimented, compulsory system of medical care.

If legislation such as has been proposed by Senators Wagner and Murray is enacted into law, the physical and other welfare of present and future generations of Americans will be greatly imperiled! Physicians cannot evade their responsibility to aid in preventing such a calamity. Something more than "alertness against sabotage" is indicated.

It behooves physicians, everywhere, to study the implications contained in President Truman's message, and equally important, its legislative symbol, as expressed in the Wagner-Murray bill, S. 1606, which by indirection, now has the sanction of the Chief Executive of the United States.

To recapitulate:

(1) What kind of a medical profession would S. 1606 produce in the days to come?

(2) What kind of medical care would future generations of Americans receive under the proposed laws? These are questions worthy of serious thought by all Americans.

The U. S. delegation was composed of the following persons (none of them physicians) representing the groups specified:

Government—Senator Elbert D. Thomas (D., Utah), delegate; Assistant Secretary of State Adolphe A. Berle, Jr., substitute delegate for Miss Frances Perkins, the official delegate; Frieda S. Miller, Otis E. Muliken, Charles W. Taussig, A. Ford Hinrichs, and Isadore Lubin, Advisers.

Management—Henry L. Harriman, former president, U. S. Chamber of Commerce, delegate; Henry S. Dennison, Charles Redding, and Clarence G. McDavitt, advisers.

Labor—Robert J. Watt, American Federation of Labor, delegate; William Green, president, American Federation of Labor; Adviser; George Meany, adviser.—Editorials, *Journal, California and Western Medicine.*

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(Continued from Page 462)

A WAGNERIAN SQUINT AT THOMAS JEFFERSON AND BENJAMIN FRANKLIN

Jefferson drafted the Constitution of the United States and Franklin swayed the constitutional convention at will. Jefferson pursued medical science throughout the land because of his general interest in the subject, and Franklin lacked only a medical degree of being one of the best doctors in the United States. It seems strange that these proponents of medicine and good government could have been so short sighted as to have overlooked social security including compulsory health insurance. Since the founders of our government failed so utterly in this respect it is remarkable that the American people did not fill the breach rather than let the opportunity pass to certain government officials. But, seeing that Bismarck with his social security program set the stage for Hitler and since the German people have achieved such a high place in the history of civilization perhaps we should have a great American Bismarck even at the cost of a few billion bucks and personal liberty. The Teutonic philosophy which has helped to put the German people where they are today may be just what the people of the United States need. If so, why worry about a little small change and the loss of individual freedom.

If we want to move on toward the goal the German people have attained we should accept the Wagner proposal without delay. But we should make up our minds and let Congress know. It's time to decide what are the eternal pillars of Society. Strange to say, in spite of the failure of Jefferson and Franklin and their associates, we have grown stronger and lived longer and have whipped the devil out of our undemocratic enemies. Why not make up our minds to keep the devil out of our democracy.—*Journal of the Oklahoma State Medical Association,* January 1946.

IS THE CURE WORTH THE PAIN?

"The fact is," broadcasts Senator Wagner, "that the views of the American Medical Association do not represent the views of many doctors in the United States."

Thus the Senator, running true to form, casts the implication that the rank and file of the medical profession would favor his political schemes for supervising the national health if the influence of organized medicine could be broken. From the moment of its inception, the proponents of socialized medicine have undertaken a campaign of propaganda unsupported by fact or truth. They have attempted to create in the public mind the illusion that our national health is very poor, that medical care is inadequate, that the average American doctor is in accord with them but cannot express his views because of certain mythical shackles imposed by the all-powerful rulers of organized medicine.

From the President down to the Surgeon General of the United States Public Health Service these politicians assure us that they do not intend to socialize anything. They assure us again and again that the proposed legislation for compulsory health insurance, endorsed and supported only by administration leaders, is not "regimentation" or "dictatorship" or any part of national socialism. It is difficult to understand the collosal nerve and arrogance that presumes such a lack of intelligence and such an exaggerated gullibility of the American people. Such methods of public education have worked all too well in Europe in the past two decades. It is indeed a debatable question whether "it could happen here."

Of the "many doctors" who are riding on the administration's band wagon, Surgeon General Parran is the top example. In a recent prepared address he said, "The medical profession should begin to explore the problem objectively and come forward with solutions not objections." Whose is the problem, and to what is the medical profession objecting? We have come forward with solutions in most of the States. Our only objection is against an illusionary (and we suspect an insincere) political scheme involving the welfare of the American people, and a grabbag of billions of tax money.

Another of the alleged "many doctors" is right here in our own back yard. A political charlatan, one John Stelle, by some inconceivable genius, has gotten himself elected to the national command of the American Legion. Mr. Stelle has stupidly appointed a ten-member National Legion committee on medicine and surgery to meet with President Truman to discuss national health problems. The committee member appointed by Mr. Stelle to represent the medical thinking of the State of Michigan is one Dr. Ira D. McCoy of Bad Axe.

According to the *Detroit Free Press,* Dr. McCoy is "not a member of the State Medical Society and disagrees with practitioners of that Society in his advocacy of the President's health insurance program." This statement Dr. McCoy does not deny. The news article also states that Dr. McCoy is a graduate of the University of Michigan Medical School. This also the doctor does not correct, although he is not a graduate of this school which is designated in the American medical directory as "MICH-1". The directory lists Dr. McCoy as graduating from a school designated as "MICH-5" which is no longer in existence. Of Senator Wagner's "many doctors" here we have, no doubt, an example of the type that constitutes his ideal of the medical "real McCoy".—A.C.P. in *Bulletin,* Genesee County Medical Society, February 1946.

* * *

TWO THINGS TO REMEMBER

1. Political distribution of medical care would entail making a public record of the characteristics and the most intimate and sacred personal relationships of each and every patient. The privacy of every human being would be invaded and violated. It can be imagined how the information might be used by the curious and the unscrupulous.

2. The effectiveness of medical care is wholly dependent upon the skill of the physician. The American doctor is a human being—a personality. He must be free to act as an individual. He should not be robbed of his freedom of action and decision. Bureaucratic direction would destroy the factor that is the secret of his effectiveness.

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TWO THINGS TO REMEMBER

(Continued from Page 464)

President Truman has endorsed a system to provide political distribution of medical care in the United States. However, the Congress will have to pass the laws that would introduce this alien and totalitarian system into this country.—Editorial, *Bulletin,* Ingham County Medical Society, February, 1946.

THE BLUE CROSS

It has perhaps escaped the notice of the average American that the United States government has for a generation conducted an experiment in state medicine through its care of ill or disabled veterans of the first World War. Nominally there have been some restrictions based on the veteran's condition and his ability to pay, but in practice the government pays. Recent investigations by congressional committees and servicemen's organizations have revealed serious abuses. Medical service in the veterans' hospitals has been rated "poor to average." It has been shown that the government service has not attracted a high quality of professional talent; has not encouraged experimental research and scientific progress in new methods of treatment; and in general, has been inefficiently operated. Sweeping reforms are demanded as the government prepares to extend the service to veterans of this war. Surely that object lesson should stand as a warning against the extension of government-paid medical service to the families of America.

* * *

Michigan can well be proud of the fact that it was a pioneer among the states in the setting up of a medical service plan and that no other state has such extensive coverage. The success of the experiment is something to cheer about. Here is concrete proof that state medicine a la Murray-Wagner-Dingell is as unnecessary as it would be dangerous to the American philosophy of the individual's relation to his government.

* * *

Michigan, by trying the voluntary plan and making a success of it, has provided a shining example for the rest of the country to follow. What organized medicine has accomplished in this state with the aid of labor unions, large employers and the Blue Cross plan, can become equally effective in other states—and must be, if this nation is not to be forced to swallow the bitter pill of state medicine.—*The Grand Rapids Press,* November 9, 1945.

DOROTHY THOMPSON SEES DANGER IN HEALTH BILL

Cost of Federal Medical Insurance Likely to be Far in Excess of Present Doctor Bills

The phrase "economic bill of rights" has a magical quality like "liberal" and "progressive." Just attach one of these words to a measure, and critics back down as though before a fetish. But in a world where progress moves on crutches conservatism may mean in some cases the last stand of liberty and common sense.

Few "liberals" are likely to reveal the illiberality of part of the proposed Federal health scheme. Some of it is excellent. A widespread hospital construction program is urgently necessary, and for that Government can make the economic grant of credit. The national science research prosposals are all right, if it is possible to keep the direction in the hands of competent medical scientists and not a political tsar. Public health services for maternal and infant care can well be extended through Federal grants-in-aid, and cash insurance against illness, as part of unemployment compensation, is reasonable.

But the main part of the proposed measures—universal compulsory Federal insurance against illness of every wage and salary earner by a tax of four per cent on his income up to $3,600 will, if past experience elsewhere is a guide, mean vast overpayment for inferior services; that the poor pay for the rich, and not the other way around; and that income that should go for illness prevention in the form of nutrition, clothing and shelter will be forcibly extracted to pay for the results of deprivation. The only people who will profit will be the new ranks of bureaucrats, two for every physician, supported by the people's contributions. The expenditure for ink will exceed that for iodine.

Penalizing the Poor

On the matter of state medical care through enforced contributions there is plenty of evidence.

State insurances are a means whereby the state skims off their incomes and gives part back in services, many of which the people are better able to provide for themselves as individuals.

Under the Administration's plan everyone who works would, during the lifetime of his earning power, pay 4 per cent of his income up to $3,600. An employe with an income of $2,000 per year would pay $80. One with an income of $3,600 would pay $144. Everybody working would contribute—perhaps three or four of the same family. Any employe with an income above $3,600 —a salaried man with an income of $10,000, a movie actor with income of $200,000—would also pay $144.

In private medicine, completely apart from the many co-operative non-profit group insurance schemes in operation, physicians daily perform millions of dollars' worth of free services. Their wealthy patients help finance the indigent. This is not a proper situation, but it is more just than the Government bill.

High Fees

If the cost of the services offered in return for 4 per cent of annual income are compared with those offered by the many co-operative schemes in existence, the price is exorbitant—as well as compulsory. Mutual non-profit schemes cover, for instance, some 23,000,000 industrial workers. One of these, under which 2,300 companies are insured, provides, for $60 per year, medical care for all workers *plus* their dependents, in home sickness, accident, hospitalization, surgical services—up to a fee of $150—laboratory fees up to $30 per year—and physicians' care up to fifty visits.

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Aims and Purposes of the Conference of Presidents and Other Officers of State Medical Associations

By A. S. Brunk, M.D.*
Detroit, Michigan

At the Detroit and Denver Medical Public Relations Conferences last spring, instruction was given that a conference of the Presidents and Other Officers of State Medical Associations be called before the end of 1945. This meeting was held in Chicago on December 2, and 208 persons, representing forty-one states and the District of Columbia, were present. They voted to make *permanent* the "Conference of Presidents and Other Officers of State Medical Associations" and elected officers and an executive committee. By-laws were adopted, making the conference the socio-economic clearing house of all state medical associations.

At the Chicago conference of Presidents, four resolutions were given unanimous approval in accordance with the recommendation of the conference. These resolutions were referred to the House of Delegates of the American Medical Association for sanction and for implementation through the AMA council on Medical Service and Public Relations. It is noteworthy that all four proposals for the betterment of medical men and those whom they serve were endorsed by the Legislative Tribunal of the American Medical Association on December 5, 1945.

The resolutions on voluntary group medical care programs, on modern medical public relations, and on the formation of a national health congress were referred to the AMA board of trustees and council on medical service for *immediate action.* In fact, the *urgency of creating a national program on group medical care plans, on a voluntary basis,* was stressed in the report of the reference committee, not once but *twice.* All here know that the voluntary system of medical care, aided by supplementary features such as medical service plans, offer *better* medicine for the American people than any compulsory tax-ridden proposal; but an effective program of group medical care must be *national* in scope; this is the job the medical practitioners of the nation, through the AMA House of Delegates, handed to the AMA board of trustees and the council on medical service and public relations. I have been informed that the council on medical service leaped into immediate action on this pressing problem. Our congratulations and thanks are due the progressive, wide-awake council on medical service and its alert and active chairman, E. F. McCormick, M.D., as well as its industrious secretary, Tom Hendricks, for trying to do an outstanding job under trying and frequently discouraging conditions.

We shall await with interest the reception that the AMA Board of Trustees extends to the proposal of the Council, as well as to other proposals for a national voluntary group medical care plan which may be presented. In this matter medicine may have its last opportunity to assert leadership in social progress.

The fourth resolution on the medical profession's sponsoring health legislation beneficial to the

Presented at National Conference on Medical Service, Chicago, February 10, 1946.

*Dr. Brunk is President of the Conference of Presidents and Other Officers of State Medical Associations.

people—(which was considered by the conference of Presidents to be the most important of the four resolutions), was nicely but most unwisely pigeonholed by being referred for six months' study to the board of trustees and the council on medical service. By June or July—if and when the "study" is completed—the proponents of compulsory regimented schemes in Washington, D. C., will have gained additional valuable time. Already two months have passed since the House of Delegates session, and while the pressure-groups for bureaucratic socialized medicine (including Mr. Truman and Dr. Parran) are lined up for hearing on the monstrosity they hope to foist upon a misinformed and uniformed people, no reports of progress have reached our ears concerning the study of this resolution in which the whole medical profession of this country is vitally, critically interested! Who is responsible for this fiddling while medicine burns?

No group can outline the important principles of a health legislation program *better* than the *medical profession.* The only program of this type that will be workable must be developed by the practitioners of medicine. The knowledge and experience of medical practice must be the keystone of successful health legislation. That is not my humble opinion, *alone,* but is the judgment of legislative leaders who have longtime reputations for sound statesmanship. They have expressed the same sentiment, and very recently, they want to sponsor a health legislation program devised by the medical profession. They know that such a plan will be sound, that it will be better for the people and for this great country. They are *begging* the doctors of medicine of America to present them with the general principles of a health legislation program—and to date, the doctors have been too busy *studying.* The composite outline of health legislation, developed by eleven state medical societies, which was the basis of the resolution on health legislation beneficial to the people, adopted by the conference of presidents on December 2 has been smothered for the next six months. What is the answer? I am no seer, so have no answer of my own, but I shall give you the prophecy of one of the leading statesmen in Congress—a friend of the medical profession and of all the people. He says (and I repeat this with a heavy heart) that medicine as we have known and enjoyed it for a long time, will come to an end *if* some group of courageous practitioners does not do the job which a scientific and educational institution appears unable to do. Further, he states that congressional leaders are looking to an organization of State Medical Societies to carry the torch. This, gentlemen, is a grave responsibility—one that the States Societies have not *sought.* But when medicine is burning, volunteer firefighters must have the edifice if the regular force absents itself for six months' study. *If need be,* the Conference of Presidents and Other Officers of State Medical Societies will accept this challenge, and solve the problem through action of the states, should this greatest question of the day not receive *elsewhere* the attention it deserves. The job *must* be done and *WILL* be done —(if not by us, then by our enemies). We want a free medicine to progress, to be *permanent* in America. Our duty is to keep it so, to the last ounce of our strength, our effort, and our worldly goods. To do otherwise would be to fail in our sacred duty to our profession, to our patients, to ourselves. In doing its share of the monumental task, the conference is merely living up to its high aims and purposes. The conference of Presidents solicits your personal enthusiasm and active support. When it seeks your help, it is merely asking you to help yourself. It is only saying: "Let's have your hand, doctor, to keep American medicine the best in the world, for the benefit of the people you now serve and those future millions who will benefit from the kindly modern ministrations of the men and women who *follow* you in the glorious ranks of Hippocrates."

MSMS

MODIFIED "IRON LUNG" FOR POLIO PATIENTS

Infantile paralysis victims who require artificial aid in breathing are promised an improvement over the usual type of "iron lung," in an invention by Dennis R. Scanlan of St. Paul, Minn., on which U. S. patent 2,383,821 has been granted. Instead of enclosing the patient's body in a metal chamber, with only his head projecting, the new device encloses the torso only, and consists mainly of rubber or other flexible material, with only a metal breastplate through which the necessary respiratory movements are transmitted. The patient is able to move his limbs with considerable freedom, and to have his bed raised to varying reclining angles, thus escaping the monotony of lying flat on his back all the time.—*Science News Letter,* Sept. 15, 1945.

Medical Care for Veterans

A Digest of the Status of Veterans as Understood by the Medical Profession

What every doctor should know about the medical care of veterans.

I. Basic Premises

1. The veteran is an individual.

2. The veteran has certain privileges granted him by the government, in recognition for services rendered, including certain medical care.

3. The veteran shall receive the best service the medical profession has to offer.

II. Rules Governing Medical Care

1. *Previous to Spanish-American War*

He came under the old Superintendents of the Poor (now part of the County Department of Social Welfare).

2. *Spanish-American War Veteran*

Legislation removed him from indigent class and placed him under County Soldiers and Sailors Relief Committee, medical care being authorized by the committee representative. This also applies to World War I and World War II veterans. It now is called upon mainly in emergencies, for medical care, and food. It operates from limited, county tax-collected funds.

3. *Veterans of World War I*

In addition to the above, the Veterans Bureau was created by federal law providing veterans hospitals and offices in each state, with care rendered for *service-connected disabilities.* A presidential directive was issued providing care for non-service connected disabilities if the veteran certified his inability to pay. The Veterans Bureau has since become the Veterans Administration and the Veterans Hospitals are now classified under Veterans Facilities.

4. *Veterans of World War II*

In addition to the above, the veteran is covered under the "GI Bill of Rights." The provisions, in essence, are:

(1) The veteran must have a discharge not under dishonorable conditions.

(2) He is entitled to free medical and hospital care for service-connected disabilities.

(3) If not already done, he is entitled to a physical examination to determine whether a disability is service-connected, and the percentage of disability for pension rating determined.

(4) Women veterans are entitled to care for any disability, except normal delivery, and may be cared for in any civilian hospital (because of lack of facilities in government hospitals).

III. Implementation of Medical Care for Veterans in Michigan Under the Michigan Medical Service and Michigan Hospital Service Contracts with the Veterans Administration

Medical care for veterans in their home city hospitals, their individual homes, or in the offices of their family doctor is provided.

Provisions of the Contracts:

1. The veteran must first contact the Veterans Administration main offices at 1920-21 Union Guardian Bldg., Detroit 26, Michigan, and if he has, in his record, certification of a service-incurred disability authorization, he will be sent to Michigan Medical Service, and then forwarded to the veteran with instructions for him to consult his doctor.

2. If the service connection of the disability has not been established, the veteran will be authorized to have an examination to establish the amount of disability. (The doctor forwards the examination results to **Michigan Medical Service** and a rating will be promptly made. Authorization for treatment will then be given by the Veterans Administration. FOR MEN, THIS TREATMENT IS LIMITED TO THE EXTENT OF THE SERVICE-CONNECTED DISABILITY.

3. Women veterans may receive treatment for any disability, service-connected, except normal delivery.

4. Once treatment has been authorized, as above, the veteran is entitled to the best care that can be given.

5. Doctors are paid by the Veterans Administration through the Michigan Medical Service at rates listed in the Uniform Fee Schedule for Governmental Agencies. (These rates were established by the MSMS House of Delegates in September,

1945.) MMS will pay immediately and will carry the expense until reimbursed.

6. Emergency treatment. (a) If the disability is service-connected it is to be treated at once by the doctor or hospital, but telephone authorization (reversed charges) should be had from the Veterans Administration if possible. (Detroit-Dearborn 1860). This phone call may be made and authorization obtained by the doctor, the patient or the patient's family. (b) If the emergency is not service-connected, it will be paid by the State Office of Veterans' Affairs. The local county Veterans' Councilor should be contacted or call Major Alquire or Mr. Lyman C. Smith at 21221 Lansing.

7. Doctors authorized to give treatment to veterans must be "fee designated." To receive this authorization, any doctor who is willing to cooperate with the Michigan Medical Service may:

(a) Make application in writing, or

(b) Return completed card, mailed to him, to the Michigan Medical Service, or

(c) Fill out and send to Michigan Medical Service, the blank published in the February issue of the JMSMS. (The address of Michigan Medical Service is Washington Blvd. Bldg., 234 State Street, Detroit 26, Michigan.)

8. Michigan Hospital Service has the responsibility of providing for semi-private rooms in the hospital except where necessity dictates otherwise. If the veteran demands a more expensive room or pays an extra amount for the room, the Veterans Administration refuses all responsibility for the expense.

9. Every veteran who served in the Southwest Pacific Area may (and should, due to potential malarial infection) file a claim for service-connected disability. If the patient suffers from malaria a free supply of atabrine is available through the Veteran's Councilor.

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ERECTION OF NEW ARMY MEDICAL LIBRARY BUILDING PLANNED

Plans which are now under way for the erection of a new building for the Army Medical Library will be furthered this spring when a request for funds will be included in the War Department estimate for the fiscal year 1947, scheduled to come before Congress.

The building, which architects estimate will cost $10,000,000, will be located on land named as part of the proposed postwar development of East Capitol Street from the National Capitol eastward to Anacostia.

Headaches from the Otologist's Point of View

By Claude C. Cody, III, M.D.
Instructor of Otolaryngology, University of Michigan Medical School
Ann Arbor, Michigan

THE NUMBER of patients consulting the otologist for the relief of headache is appalling. The vast majority of these patients present themselves with the self-made diagnosis of sinusitis. The layman has recently been introduced to his sinuses through advertising and popular literature, and little understanding them, accepts them as a plausible cause for any type of headache or pain. Actually, there is probably less than 5 per cent of all headache referable to the sinuses.

The specialist has to proceed with caution in examining such a patient. There is always the tendency for him to treat the case along the narrow field of his own specialty, giving little regard to the patient as a whole. He thus may be overly influenced in his diagnosis and treatment by his special training.

The most important step, I believe, in attacking the problem of a patient with headache, is to obtain a careful and thorough history. This should embody all of the characteristics of the headache, including the manner and time of onset of symptoms, duration and location of headache, type of pain, and whether or not there are any associated symptoms, such as nausea, vomiting, scotomata, et cetera. The patient's general condition, both mental and physical, should be properly evaluated, noting whether he is chronically or acutely ill; whether there is a tenseness or emotional instability in his make-up and especially if this patient appears to be unusually complaining and hypersensitive to pain. Finally, just what type of treatment and diagnosis has this patient previously had?

After all, this is the standard method by which any physician usually investigates his patient, but sometimes we as specialists become over-enthusiastic in our special fields. A physician has to guard against being a "symptom treater," rather employing his powers to investigate his patient to such an extent as to attempt at least, to arrive at the etiology of the trouble.

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Now, we come to the actual examination of the patient. Pain referable to the ear is usually well localized. The severe pain of acute otitis media can no better be described than by a crying baby clawing and tugging at his ear. The pain and particularly the tenderness of mastoiditis are also well localized, and the uncomplicated case does not usually present any great problem.

When there is a deep boring pain over the whole side of the head, associated with a draining ear on that side, and when this pain is more marked at night, the experienced clinician becomes at once wary of a possible dural exposure to pus, constituting an epidural abscess. There is usually little tenderness on deep pressure but percussion of the skull gives pain over the parietal area.

We are all more or less familiar with the gradual and insidious onset of the headache, which may occur after a presumably satisfactory convalescence from mastoiditis. This headache, also of the deep boring type, is steady and severe, and is associated with vomiting which may be projectile. When choked discs and increased spinal fluid pressure are also present, there can be little doubt that we are dealing with an intracranial space occupying lesion, probably an abscess.

The mechanism of headaches in brain tumors and abscesses is interesting. It has been shown experimentally that increased intracranial pressure alone does not cause pain, but when the insensitive dura is pulled or displaced to one side, as by a brain abscess, tension is exerted on the cerebral arteries, veins, and supporting tissues, and pain becomes manifest. Thus the arteries, veins, great venous sinuses and a small portion of the dura at the base of the skull contain any real pain fibers.

Petrositis, with suppuration of the apex of the petrous portion of the mastoid bone, is a complication of mastoiditis that in recent years has excited considerable interest. It gives rise to the interesting triad known as Gradenigo's syndrome. This consists of a draining ear associated with a sixth nerve paralysis and a deep seated pain in back of the eye on the same side. The suppuration at the petrous apex encroaches both upon the long intracranial course of the abducens nerve and particularly on the ophthalmic division of the fifth nerve, with the retro-bulbar pain and paralysis of lateral gaze on the involved side. With adequate drainage of the mastoid cells at the petrous tip, and cleaning up of the actual mastoid process, there is a complete subsidence of these symptoms.

In approaching the nose as a possible cause for headache, the otolaryngologist looks first, quite naturally, for the presence of a suppurative sinus disease. He also notes any unusual anatomical configuration, such as a septal spur, septal deviation, or enlarged turbinate that might possibly be a cause of headache. The character and type of headache may well suggest possible sinus disease. Classically, frontal sinus suppuration is characterized by frontal pain, coming on in the later morning almost with clock-like regularity. There may also be some tenderness over the involved sinus. The maxillary sinus may also give a regular, recurrent pain, being noted usually in the afternoon. This may manifest itself over the involved antrum, the jaw and teeth on that side, or sometimes actually be referred to the supra-orbital ridge. Ethmoid disease, when it predominates, may produce a boring pain in the back of the eyes and at the base of the nose. Sphenoid sinus pain expresses itself in occipital headaches, which radiate down the back of the neck and between the shoulder blades. These headaches, sometimes severe, are accentuated on bending over and may be attended with vertigo.

Most of the above sinus pain and headaches occur during acute or subacute flare-ups of the disease. There may be associated constitutional symptoms with malaise and fever, this alone being able to give rise to headache. Upper respiratory infection, with nasal obstruction, frequently present with fever, also constitutes a source of headache. Hower, unless we are dealing with an acute sinus suppuration, there is usually no head pain at all. The most common and outstanding symptom of chronic sinusitis is that of purulent nasal discharge without headache.

Then let us consider that rather illusionary entity of vacuum headache. Even the layman can somehow visualize his sinus opening being swollen shut with the absorption of air in the sinus and the resulting partial vacuum causing a headache. Undoubtedly such a condition exists, if one takes the proper precautions in making the diagnosis. Those of us who have ever ridden in a plane with a mild upper respiratory infection, may have heard a sudden hiss of air in the nose, followed by immediate comfort. When a blockage of the frontonasal duct is suspected mere shrinkage of the opening with any vasoconstrictor should give instant relief. Any anatomical obstruction, such

as a polyp, septal spur, or impacted turbinate, should also be corrected. Classically, vacuum headache is not associated with any form of suppuration, but is purely an anatomical obstruction of the frontonasal duct.

The so-called "sphenopalatine neuralgia," or Sluder's syndrome as described by the late Greenfield Sluder is associated with irritation of one of the major sympathetic ganglion lying just posterior to the middle turbinate and beneath the mucosa of the lateral nasal wall. This ganglion has complicated and extensive ramifications with certain cranial nerves and branches of the autonomic nervous system. Its irritation by infection, by enlarged turbinates or sharp septal deviations, is thought to give rise to a specialized headache through its connection with the fifth nerve. Sluder describes "the lower-half headache as beginning at the root of the nose, in and about the eye, the upper jaw and teeth, extending to the temple and zygoma on that side and especially the mastoid process." It continues on back by way of the occiput and neck and may extend to the shoulder, or even to the arm, hand and finger tips. The therapeutic test is to cocainize the ganglion topically. For more permanent relief, injections with procaine or alcohol may be resorted to.

Many times, the rhinological examination is entirely negative as to any direct cause for headaches. This is particularly true in typical migraine headache; though occasionally a low-grade allergic rhinitis may be found. These periodic headaches, involving the hemicranium, are associated with nausea, vomiting, scotomata, and frequently lacrimation, photophobia, and vertigo. There is a strong family history in the typical case, and it is felt today that all of these patients should have a careful allergic survey. Ergotamine tartrate is frequently used for temporary relief pending determination of the fundamental cause.

Histamine headaches or cephalgia follow closely migraine headache. These, too, are unilateral involving the eye, temple, face and may spread to the neck and shoulder on the involved side. The upper and lower teeth may also be involved. Attacks begin after middle age. The attacks come on suddenly and may awake the victim from a sound sleep. An intense deep pain, constant and boring in character, is classical. An associated congestion and profuse watering of the involved eye, rhinorrhea, and unilateral stuffiness of the nostril and profuse perspiration are features. There are no trigger zones as seen in trigeminal neuralgia and the pain does not follow the distribution of the fifth nerve. It should never be confused with migraine as nausea, vomiting and scotomata are invariably absent. Heredity plays no role in histamine headache. Attacks can be induced by injection of histamine. Treatment resolves itself in histamine desensitization.

A frequently overlooked and understressed cause for headache is a temperomandibular arthritis. The pain or pains from poor articulation of the temperomandibular joints are apt to be very severe and constant, localized to the top of the cranium and the occiput and behind the ears. Sometimes the pain is so severe the whole head aches for hours at a time. According to Costen, the severity of the pain is worse at the end of the day. This author makes the diagnosis by the presence of dental malocclusion; tenderness on palpation of the joints, both internally and externally; and by x-ray. Also I have frequently been able to elicit a history of snapping or popping of the jaws, either accidentally or by habit, at some time in the past. Treatment, of course, consists of removing the cause, usually correcting the bite.

Dental infections and especially apical abscesses may cause severe pain. Usually the lower teeth localize the pain fairly well but the upper molars have a tendency to refer pain to the ears and occasionally the eye. We should never be too proud or too careless to overlook the teeth in seeking for various head pains and aches. It is embarrassing to have done a careful otolaryngological examination and in writing up the case, become aware that the condition of the teeth escaped notice.

A great number of patients, particularly during the war years, have complained of severe generalized headaches, stating that the headaches were unbearable. Yet the patients usually give no objective signs of pain, and sleep is not interfered with to any extent. General and special physical examinations are negative. Such headaches are probably on the basis of tension, and, to some extent, fatigue. Psychogenic headaches are similar, but usually do not fluctuate to the degree of the tension headaches. Both types require careful examination and evaluation for diagnosis. Treatment, of course, is largely reassurance, rest and psychotherapy.

Of course headaches may occasionally be on some systemic basis, related to endocrine disturb-

ance, or to the condition of the blood. The possibility of a hypertensive heart disease should not be overlooked. This can be brought out in the general history and examination of the patient.

Occasionally cervical arthritis, or a spasm of some of the long posterior cervical muscles may give rise to occipital or mastoid pain and only a careful history (sometimes a "snapping" of the cervical vertebrae is stated to occur) may give a clue as to the cause. Usually palpation of the spinous processes of the cervical vertebrae may elicit an area of tenderness. Or a tender cervical muscle may be discovered. Treatment is directed to the cause. X-rays of the cervical spines are indicated to rule out inflammation, tumor, or cervical discs. Where muscle spasm predominates, heat, and massage, occasionally with salicylates, is the treatment of choice.

In this discussion I have tried to present the type of case that the otolaryngologist is frequently called upon to treat. This sort of case not infrequently gets little satisfaction because of the overspecialization in diagnosis. It would be vastly more satisfactory to give each case of headache the benefit of a careful and complete history and physical examination; and not let the diagnosis become biased by overspecialty.

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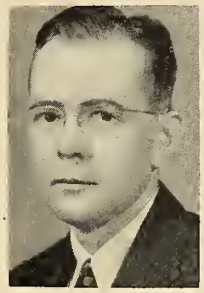
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SULFA DRUGS IMPROVED

The addition of a fraction of 1 per cent of iodine to sulfonamide makes a chemical which is very effective in the treatment of wounds. It is called sulfaiodine and is described as being more powerful than penicillin in that it has a much wider field of usefulness. No disease organism has been found, says Dr. Paul Goodrich, of Rutgers University, which resists it. In cases in which sulfa drugs are merely inhibitive, the new compound kills not only germs but spores. In addition, it is active in the presence of blood, serum, peptone or other substances which sometimes are found in wounds, and which reduce the power of the sulfa group of drugs. Unlike iodine alone, it causes no tissue damage.

Ocular Causes of Headache

By Edmond L. Cooper, M.D.
Detroit, Michigan



HEADACHE is a symptom, not a disease. With the exception of poor vision probably no other symptom is as common in an ophthalmological practice. The well-trained and successful ophthalmologist must therefore be able not only to diagnose and treat headache from ocular causes but must also differentiate it from non-ocular headache. He will see many patients complaining of headache in whom he finds no disease or defect of the eyes and these patients should be directed into proper hands. It is only by rendering such service to their patients that ophthalmologists can maintain their positions as physicians and distinguish themselves from optometrists and other non-medical practitioners.

The accuracy of diagnosis and success of treatment of headache is in direct proportion to the care exercised in taking the patient's history. Inquiry should be made into the location of the headache, the type of pain, and whether it is constant, intermittent or periodic. Is the pain localized to any particular part of the head? What time of day is the pain most apt to occur? Is there any relationship between the pain and use of the eyes? Does the pain follow reading, movies, working or driving? Does it occur outdoors as well as indoors? Has the headache occurred previously and been corrected by any means, such as wearing glasses? What is the patient's occupation and his mode of life? Are there any associated symptoms such as watering or burning of the eyes, plugging of the air passages, vomiting, scotomata, or sensitivity to light? How good is the patient's general health?

An ocular headache is most often orbital, supraorbital, or frontal though it can be temporal, occipital or a neck pain. It usually is a dull, constant, sometimes throbbing headache, and is often relatively mild. More often than not it is not incapacitating. There usually is a direct relationship between onset of the headache and use of the eyes,

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either for distance or close work or both. In this connection it sometimes is experienced only on working days and not on Sundays or during vacations. It is most frequently bilateral except when due to unilateral inflammation.

Like the history, the examination of a headache patient bears a direct relation to the degree of success encountered in treating it. The examination cannot be said to be complete unless it includes a thorough refraction (before the age of 45 this should be done under cycloplegia) careful investigation of the muscle balance, ophthalmoscopic examination, study of the anterior segment of the eye with the corneal miscroscope, visual field investigation and measurement of the intra-occular pressure.

Case Reports

Case 1.—A draftsman, aged thirty-four, complained of pain in the right eye of three days' duration. He wore glasses to correct a moderate hyperopic astigmatism and he thought that his glasses needed changing. The pain was mild and not incapacitating and seemed to be worse when he tried to do close work. The eye was moderately sensitive to light but not red. He had had no similar attack in the past. Before getting his glasses he had noticed bilateral ocular fatigue toward the end of the day but the present complaint was of a different sort of pain. The vision was normal in each eye with the correction he was wearing. There were numerous small keratitic precipitates on the corneal endothelium of the right eye and a faint aqueous flare. The pupil dilated readily with atropine. Under treatment for the iridocyclitis the photophobia and headache disappeared and refraction later showed that no change in the patient's glasses was necessary.

Ocular headache is rarely unilateral except when due to organic disease of the eye. It is obvious that there is a distinction to be made between the unilateral pain due to ocular inflammation and headache as the term is commonly used. However, a discussion of ocular headache is not complete without some mention of the causes of unilateral eye pain. Probably the commonest is iritis or iridocyclitis which causes a neuralgic pain in the affected eye associated with sensitivity to light, tenderness, lacrimation and sometimes blurry vision. The severity of the pain varies with the severity of the inflammation. Acute inflammatory glaucoma causes an excruciating ache in the affected eye which radiates over the whole side of the head and face and is associated with loss of vision, dilatation of the pupil, deep ciliary injection, hardness of the globe and corneal steaminess. The pain from retrobulbar neuritis is felt usually in the eyeball and orbit and is felt more severely on rotation of or pressure against the eyeball.

There are numerous other examples of ocular pathology which can cause unilateral headache, but these outstanding examples suffice. They can be easily diagnosed by a careful ophthalmological examination.

Case 2.—A middle-aged housewife complained of headache occurring in and after movies. The pain was of a mild, vague character, which she described as a sense of fullness in and behind the eyes, and was not incapacitating. She never had headache during the day but occasionally she awakened in the morning with pain in the eyes. She had worn glasses for eight years for close work only. Her general health was said to be good. Occasionally she noticed colored halos around lights at night, but these were not even severe enough to stimulate in her more than a mild curiosity and only careful questioning reminded her of them.

The visual acuity was 20/30 with each eye but with correcting lenses was improved to 20/20. The anterior chambers were shallow and the intra-ocular pressure was 32mm. of mercury in the right eye and 30 mm. of mercury in the left. After the patient remained in a dark room for one hour the tension rose to 40 in the right eye and 35 in the left eye. Ten per cent emulsion of neo-synephrin, one drop in each eye, was used to dilate the pupils. Ophthalmoscopic examination showed a shallow glaucomatous cupping of each nerve head. Visual field measurements showed no contraction of the peripheral fields but a comma-shaped enlargement of the blind spots was found. The diagnosis was chronic simple glaucoma.

It would seem obvious that the headache in this case was due to increased intra-ocular pressure. The case is included to illustrate how bilateral orbital or frontal headache can be due to organic pathology of the eyes and it exemplifies beautifully the need for thorough and painstaking examination in every case.

There can be little doubt but that had this patient consulted a non-medical practitioner glasses might have been prescribed to correct her refractive error and the glaucoma might not have been discovered until permanent visual loss had occurred.

Case 3.—A boy, aged fourteen, was sent to a boarding school after completing the first eight grades in public schools. He was required to study much more than he had previously. He had an older sister who was wearing glasses because of a convergent strabismus. He complained of frontal headaches occurring toward the end of the day always after reading or studying. There were no associated symptoms. He had no headache following movies or other use of the eyes for

distance and never on days when he did no close work. Examination revealed a simple hyperopia of three diopters in each eye and prescription of +2.00 diopter spheres to be worn during school and for all close work resulted in cessation of the headache.

Case 4.—A housewife, aged thirty-four, complained of headache over the right eye occurring at intervals during the past two years. The headaches usually occurred during the day but there was no definite relationship to any specific use of the eyes. There was rarely any headache upon awakening in the morning. She had worn glasses two years ago for one year but had not worn them during the past six months because they were broken. When the glasses were worn the headache was improved but did not completely disappear. The visual acuity uncorrected was 20/30 with the right eye and 20/20 with the left eye. The muscle balance was normal and the eyes were free of organic pathology. Examination of the refractive status revealed mixed astigmatism in the right eye and a simple hyperopic astigmatism in the left eye. The following lenses were prescribed: O.D. —50 sphere, +1.25 cylinder, axis 105, and O.S. +50 cylinder, axis 75. With this correction the visual acuity was 20/15 with each eye and the headache disappeared as long as she wore the glasses. This is an example of unilateral headache due to inequality of the refractive error.

The foregoing two cases illustrate the role of refractive errors in ocular headache. Such headache is nearly always frontal or supra-orbital and is thought to be due to spasm or fatigue of the ciliary muscle following excessive accommodation, although other theories have been advanced. Snell has evaluated the incidence of refractive errors as the cause of headache and found that hyperopic astigmatism and hyperopia cause 80 per cent of all headaches due to errors of refraction. Mixed astigmatism causes 12 per cent and he attributes the remainder to myopic astigmatism and myopia. Since the headache due to hyperopia or astigmatism is the result of excessive accommodation it is to be expected that the patient will complain that the headache follows use of the eyes, especially for close work. The amount of hyperopia or astigmatism shows no direct relationship to the severity of the headache. Individuals with relatively low degrees of hyperopia may complain quite bitterly of headache especially if their accommodative reserve is impaired by general debility or local conditions. This is well illustrated by the slightly hyperopic individual whose accommodative reserve is lessened by the approach of presbyopia.

Myopes on the other hand rarely are troubled with headache, but occasionally it does occur. The pain is usually frontal and occurs after movies or elsewhere where the patient's distance vision is being taxed. Many such headaches are due to fatigue of the frontalis and corrugator supercilii muscles which are held in a state of prolonged contraction by inadequately corrected myopes in an attempt to see better. I have several myopic patients who complain of frontal headache whereever a change in their myopia takes place and they use this symptom as an indication that it is time for a change.

Case 5.—A college student complained of headache occurring after close work and after movies but at no other time. The headache was frontal and temporal and occasionally radiated to the occipital area. There were no associated symptoms. The patient was a nervous, "high-strung" individual who drank a great deal of coffee and smoked over a package of cigarettes daily. He averaged six to seven hours of sleep nightly. He had been examined elsewhere and told that glasses were unnecessary. His visual acuity was 20/15 with each eye and examination under cycloplegia showed hyperopia of one diopter in each eye. There was an esophoria of 1 prism diopter at 20 feet and esophoria of 5 prism diopters at 14 inches (Maddox rod). There was no vertical imbalance. Abduction was 4 and adduction was 38 at 20 feet. Glasses were prescribed incorporating a +0.50 diopter sphere with 2° prism base out before each eye to be worn for all close work but not for movies. The patient was advised to discontinue coffee and if possible cigarettes and to sleep at least eight hours nightly. He reported a year later that the headaches were greatly improved but not completely relieved. It is possible that some sort of orthoptic training might have benefited this patient but this was not tried.

Case 6.—An accountant, aged fifty-one, complained of diplopia of four months' duration and headache of thirty-five years' duration. He had worn glasses since boyhood because of eyestrain and because his eyes turned inwards. The diplopia had occured previously and he had been able to control it by suppressing one eye temporarily after which he could again use two eyes. During the past four months he had been unable to control the diplopia except by closing one eye. The headache had been almost continual for thirty-five years, severe throbbing in character and radiating from behind the eyeballs all over the head. It had not increased during the past four months until one week ago when it seemed to get worse. The patient impressed the examiner as being a neurotic individual given to relating the history in great detail. However, he had no other complaints except those relating to his eyes.

The refractive error as measured under homatropine and paredrine cycloplegia was as follows: O.D. +6.75 sphere, +.75 cylinder, axis 45; and O.S. +5.75 sphere, +1.75 cylinder, axis 115. With this correction the

visual acuity was 20/20 with each eye. The glasses he was wearing were approximately this correction and incorporated a 3 diopter prism Base Out in each lens. Examination of the muscle balance with correction showed an esotropia of 18 prism diopters at 20 feet and orthophoria at 14 inches (cover test). Without correction the esotropia was 35 prism diopters at 20 feet and at 14 inches there was an esophoria of only 4 prism diopters. The near point of convergence was 5 cm. On the synoptophore the objective angle was 12° Base Out and he was able to diverge the large targets only to 10° Base Out. Fusion and stereopsis were excellent at near range. The diagnosis was high hyperopia and divergence insufficiency with a secondary convergence excess. The visual fields and intraocular pressure were normal. The diplopia was unchanged in all directions of gaze. The patient was referred to an internist and to a neurologist neither of whom found any cause for the headache.

A 3 mm. recession of the internal rectus muscle and a 4 mm. resection of the external rectus muscle of the right eye was advised and performed. Following the operation glasses were prescribed without prisms. During the two months since the surgery was performed and the glasses were prescribed, the patient has had no diplopia and no headache. There is an esophoria of 4 prism diopters present for distance only but no esotropia, and diplopia cannot be elicited even with a red glass.

The role of ocular muscle imbalances in headache is an important one, and not all cases are as dramatic as the one just described. Esophoria and hyperphoria are more apt to cause pain than exophoria. The pain is usually frontal, supraorbital, or orbital especially in the horizontal imbalances. In hyperphoria, due to the head tilt often seen in this condition, the pain may be occipital or even along the superior or inferior nuchal lines or at the point of attachment to the skull of the sternocleidomastoid muscle. This is especially true if the hyperphoria is due to a paresis of one vertically acting muscle or secondary spasm of another.

Exophoria causes headache only when due to a convergence insufficiency and then only following close work. This sort of imbalance is usually seen associated with the onset of presbyopia.

The satisfactory treatment of muscle imbalance includes prescription lenses, prisms incorporated in the glasses or in a hook front frame for part-time wear, orthoptic exercises, muscle surgery, and attention to the individual's mode of life. The treatment of each case of heterophoria must be decided on its own merits.

The tropias on the other hand are rarely associated with headache except coincidentally. The headache in heterophoria is due to the effort exerted by the patient to attain binocular vision. The heterotropic patient usually has very poor fusion and as a result makes no attempt to attain binocular vision and so does not develop headache.

There is no doubt but that headache can be due to excessive light or sensitivity to light.

Case 7.—A physician complained of mid-frontal headache occurring only after he played golf or went fishing on a bright sunny day. He wore glasses correcting a moderate astigmatism but had no headache except when exposed to bright sunlight. He noticed that he habitually contracted the orbicularis oculi and corrugator supercilii muscles when out in the sun, and the headache was thought to be due to fatigue or spasm of these muscles. His diet was thought to be adequate. Prescription of No. 4 Ray Ban glasses, incorporating his correction, to be worn for sports gave him relief.

Case 8.—This case is not mine but was reported elsewhere by Horton. A woman, aged fifty-six, had headache of eleven years' duration. The pain was at first only occasional but later occurred almost constantly. She also complained of momentary pain when she looked at a bright light. The intravenous administration of histamine gave some relief from the headache and daily intramuscular injection of 25,000 units of vitamin A for four days brought complete relief of the pain and she was no longer sensitive to light. It has not recurred during the first six months following treatment. It seems possible that the headache may have been due to a vitamin A deficiency.

Many headaches are not found by the ophthalmologist to be due to ocular defects or inflammation, but nevertheless there are in many cases ocular signs which may aid in making the proper diagnosis. Abnormalities of the pupillary reflexes or visual field defects may help localize the cause of headache along the visual pathways. The same is true of paralysis of the extra-ocular muscles. I have seen patients suffering from headaches due to luetic basal meningitis in whom the cause of headache was not discovered until paralysis of the external rectus muscle developed. Headache can accompany arterial hypertension, arteriosclerosis, or chronic nephritis, each of which may cause profound changes in the eye grounds. These and other causes of headache should not be lost sight of by the ophthalmologist. It is our duty to examine all patients with an open mind realizing that while many headaches are ocular in origin, others are not, and to provide for the patient as far as we are able a diagnostic service worthy of our profession.

Hypertension

Remarks Concerning Its Cause and Treatment

By Paul S. Barker, M.D.
Ann Arbor, Michigan

THE PURPOSE of this paper is to summarize recent knowledge bearing on the causes of so-called essential hypertension, and to consider various forms of treatment in relation to the underlying mechanisms of the disease. Hypertension is a complex problem and in spite of recent brilliant investigations much remains unknown and unsettled. Nevertheless it is thought that present knowledge justifies the tentative adoption of a working hypothesis as to the mechanisms of its onset and progression which will advance its clinical management from an empirical to a rational basis.

Mechanism of Hypertension

Renal Humoral Mechanism.—After Goldblatt and his associates[16], by the application of metal clamps to the main renal arteries of dogs, produced an experimental renal hypertension similar in most respects to clinical hypertensive disease, it was shown[9,30] that impairment of the renal circulation causes liberation by the kidneys of renin which acts upon one of the plasma globulins (renin activator) to form angiotonin which acts directly on the vessel walls and is the pressor substance which causes hypertension in the experimental animals. It was then shown that angiotonin injected into normal human subjects causes transient hypertension similar in many respects to clinical essential hypertension.[8,49,52] In addition, it has been found[36,37] that in patients with arterial hypertension the vasomotor responses are similar in direction and magnitude to those of normal individuals and that, therefore, the generalized increase in peripheral resistance which is responsible for the hypertension is probably not caused by neurogenic vasomotor constriction or by organic narrowing of the vessels, but more probably by a chemical substance acting directly on the vessel walls. Furthermore, in a few cases in man hypertension associated with unilateral renal disease has been relieved by removing the abnormal kidney.[41] These observations have led to the view that this renal humoral pressor mechanism is commonly responsible for the production and maintenance of clinical hypertensive disease[17,39,40,43], although attempts to demonstrate the presence of a pressor substance in the blood of patients with hypertension have been unsuccessful.[19] The impairment of the renal circulation which is thought to initiate the humoral mechanism has been attributed by some[40] to arteriosclerosis of the kidney vessels and by others[39,43] to neurogenic vasomotor constriction of the renal arterioles.

Arteriosclerosis. — The former explanation is based in part on the close correlation between hypertension during life and sclerotic narrowing of the renal arterioles[27,50] or of the main renal artery[26,55] at autopsy. Renal vascular sclerosis is almost always present in the end stage of arterial hypertension. In the earlier stages, however, a study of biopsy specimens obtained from the kidneys of patients undergoing sympathectomy shows that in about half of the cases the renal vascular changes are either absent or relatively mild.[10] In addition, many patients thought to be in an early stage of hypertension[29] display a renal functional and circulatory pattern of the type observed in experimental neurogenic hypertension[7]; they respond to a high spinal anesthesia by a reduction both of arterial blood pressure and of renal vascular resistance, a response which is not compatible with organic sclerotic narrowing of the renal vessels.[29,31] Furthermore, in many hypertensive patients the intravenous administration of pyrogenic substances is followed by a striking increase in renal blood flow, again an observation inconsistent with organic sclerotic narrowing of the renal vessels.[17,44] It is thought, therefore, that in most cases sclerotic narrowing of the renal vessels is not the cause of the hypertension, but develops eventually as a result of the hypertension.

Neurogenic Hypertension. — The evidence that clinical hypertensive disease has its inception in neurogenic vasomotor constriction is more convincing. Transient hypertension is often followed by sustained hypertension.[25] Although the value of the cold pressor test has been questioned[17] there can be little doubt that many hyper-reactors have or subsequently develop arterial hypertension.[23]

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From the Department of Internal Medicine, University of Michigan Medical School.

The observation in some patients, thought to be in the early stage of hypertension, of a renal functional and circulatory pattern like that observed in experimental neurogenic hypertension, and their response to high spinal anesthesia have been mentioned, as well as the common finding of essentially negative biopsies of the kidneys in patients with early hypertensive disease. A study of renal function and circulatory dynamics in relation to the biopsy findings[48] reveals a significant correlation; in the patients whose biopsies showed little or no organic renal vascular disease the renal blood flow and glomerular filtration rate were either normal or only very slightly reduced and the filtration fraction was normal, while only in those with advanced organic renal vascular disease were the renal blood flow and glomerular filtration rate seriously reduced and the filtration fraction increased, indicating that in the earlier stages of hypertensive disease the renal clearance pattern resembles that of experimental neurogenic hypertension. Observations on the renal circulation during emotional stress show marked reduction in renal blood flow and increase in filtration fraction accompanied by a rise in systemic blood pressure, demonstrating constriction of renal arterioles in response to emotion.[44] Partial resection of the sympathetic nervous system, whether limited to bilateral supradiaphragmatic splanchnicectomy and lower dorsal sympathetic glanglionectomy[35] or more extensive but still including the splanchnic area[20], is successful in a considerable proportion of early hypertensives in reducing the blood pressure to normal, relieving symptoms and apparently arresting the progress of the disease.[34,47] The conclusion is warranted that the sympathetic vasomotor mechanism plays an important part in the production of hypertensive disease, especially in its inception; it probably also contributes an appreciable increment in well-established hypertension.

Psychic Factors.—It is thought that the vasoconstrictor mechanism is abnormally sensitive to a variety of stimuli, psychic, somatic and visceral, or that it is subjected to an increased number of such stimuli. Chief emphasis is placed on psychic stimuli, but the attempt to define a hypertensive personality has met with only limited success.[32] It is true that many hypertensive patients show a combination of submissive and aggressive trends with emotional lability and anxiety in which resentment and chronic rage, usually suppressed, are prominent features[51], but this psychological pattern is not characteristic of hypertension; a similar picture is found "in association with other psychosomatic diseases or in the absence of somatic disturbance."[29] It would seem that in addition to this psychological pattern some degree of susceptibility, constitutional or hereditary[4,13,22,28] is necessary for the development of hypertensive disease. Some persons under emotional stress find release in action or outspoken rage; others more inhibited repress their emotions which may then find expression in a variety of functional disorders, different individuals reacting differently, with headache, sweating, tremor, palpitation, disturbed gastro-intestinal motor and secretory function[54] and, it seems reasonable to suppose, neurogenic vasconstriction. It is not necessary to suppose that abnormal psychological reactions are involved in most cases; the ordinary minor annoyances and nervous and emotional tensions are probably sufficient to provoke these responses in many individuals, and only a fortunate few escape the more serious crises of life with their accompanying anxiety, grief and resentment.

Pathogenesis of Hypertension.—The evidence leads logically to a working hypothesis which attempts to explain the manner in which hypertensive disease develops, but because the evidence is incomplete and final proof is lacking it can be only a hypothesis and nothing more. In individuals predisposed by constitution or heredity a variety of stimuli, chiefly psychic, cause neurogenic vasconstriction and transient hypertension. Such stimuli, if often repeated or long continued, lead to a readjustment of the regulating mechanisms to a higher level of blood pressure and to the establishment of a more persistent neurogenic hypertension. In this early stage little or no organic disease is present and treatment is most likely to be successful. The renal arterioles participate in this neurogenic vasconstriction and this initiates the renal humoral pressor mechanism. The hypertension is now well established. Hypertension accelerates the development of arteriosclerosis, and eventually organic sclerotic narrowing of the renal arterioles develops. The disease has now reached the irreversible late stage usually found at autopsy. The available evidence does not indicate whether the establishment of the renal humoral mechanism precedes the development of renal arteriolosclerosis or vice versa. Apparently the humoral mechan-

ism can be set up in the absence of renal arteriolosclerosis[42], and in the rat[53] and probably in man[17] unilateral renal disease causing hypertension is eventually followed by arteriolar sclerosis in the sound kidney, suggesting the priority of the humoral mechanism; nevertheless pronounced reduction of blood pressure sometimes follows splanchnicectomy in patients in which organic vascular disease is well advanced[34,47], suggesting that some other factor, possibly humoral, is responsible for the late, irreversible stage of the disease. The evidence does, however, point strongly toward neurogenic vasomotor constriction as the initial stage of the disorder. This hypothesis attempts to reconcile some of the apparently contradictory observations by relating them to different stages of the disease. It is in accord with the known facts and with clinical experience. A somewhat similar concept has been proposed by others[20,29,33,46]; more recent evidence gives it additional support.

Treatment of Hypertension

The treatment of hypertension in relation to this concept of its pathogenesis is conveniently considered in four of its aspects: (1) removal of the underlying causes, (2) reduction of the blood pressure, (3) protection of vital structures, and (4) relief of symptoms. It must be confessed that in many respects the treatment of hypertension is unsatisfactory.

Removal of Underlying Causes.—Hereditary and constitutional predisposition to hypertensive disease is not at present amenable to treatment. The response to psychic stimuli, thought to be so important in causing the neurogenic vasconstriction responsible for initiating the disease, can be influenced favorably by appropriate psychotherapy.[17,29] The guidance of an understanding physician can help many individuals to consciously cultivate an attitude of calmness and indifference toward the many minor annoyances and nervous tensions of everyday life, and to accept reality as the best solution for most major emotional crises. This is often all that is indicated, but in some cases the services of a psychiatrist are required because of deeper personality problems. While psychotherapy may influence favorably one of the underlying causes of hypertension, and should be employed, it is not likely to protect completely against psychic stimuli and their consequences.

It is thought that neurogenic vasomotor constriction of the renal arterioles is essential for the development of well-established, persistent hypertension. If this is true, surgical interruption of the vasoconstrictor nervous pathways to the kidneys, before irreversible changes, whether sclerotic or humoral, have occurred, should reduce blood pressure to normal and prevent further development of hypertensive disease. Although insufficient time has elapsed to permit a final appraisal of sympathectomy for hypertension, experience indicates that in many early cases the blood pressure is reduced to normal and the progress of the disease is checked.[34,47] The failure to achieve these results in some cases is attributed to the presence of irreversible vascular sclerosis[14] or in rare instances to the presence of anomalous or abberrant nerves which have escaped resection[45] or to the regeneration of nerves.[20] It is not known if sympathectomy is effective after the establishment of the renal humoral pressor mechanism which theoretically should be self-perpetuating, but abolishing the vasomotor tone normally present might break the vicious circle. All of the various types of sympathectomy which have been successful in relieving hypertension have included the splanchnic area. Early in the course of the disease sympathectomy limited to resection of the vasoconstrictor fibers to the kidneys should be sufficient; this would not interfere with the vasomotor control of the circulation to the remainder of the body and would not be expected to prevent transient rises in blood pressure in response to exertion or emotion, but should prevent progressive hypertensive vascular disease. The more extensive sympathectomies would cause reduction of blood pressure, even after the establishment of the renal humoral pressor mechanism and the development of renal arteriolosclerosis, by removing that part of the vascular tone due to normal or excessive vasomotor activity[36,37], but these are formidable procedures and are not commonly undertaken.

Reduction of Blood Pressure.—Even though the exact level of the blood pressure and minor fluctuations in its height are not important with respect to the progressive course of the disease, persistent hypertension accelerates the development of organic changes, and for this reason any considerable artificial lowering of blood pressure should be beneficial. It is important to keep in mind that in hypertensives, as in normal individuals, there are physiological variations in blood pressure.[1,36,37]

Reassurance, assistance with emotional problems, restriction of activities and adequate rest are often followed by a moderate, and sometimes by a pronounced reduction in blood pressure. These measures are helpful and should be employed. If, in addition, some drug has been given for the purpose of lowering blood pressure it is difficult to avoid ascribing to it the benefit due in reality to the more general measures. This has given rise to unfortunate confusion and to many unwarranted hopes and claims regarding the drug therapy of hypertension.[1] In order properly to appraise any treatment for hypertension adequately controlled observations are essential, and these are often not feasible in ordinary clinical practice. When carefully controlled studies are carried out[12,24] the results are disappointing. None of a large number of drugs, commonly used or recommended, was found to cause a therapeutically significant lowering of blood pressure; the list includes various nitrates, sedatives, choline, derivatives, extracts of glands and tissues, hormones, vitamins, proprietary preparations and other substances. The effect of the nitrites is too transient to be of therapeutic value, frequent dosage for long periods is toxic. The thiocyanates cause satisfactory reduction of blood pressure in more than one third of the patients, but they are dangerous[18] and not even the precaution of obtaining frequent determinations of the level of the drug in the blood[6] will prevent occasional fatal intoxication.[11,15] The use of amine oxidases and of antipressor kidney extracts is still in the experimental stage, but the outlook for these substances is not promising. Further experience is necessary before the value of low sodium diets can be appraised.[21] Reduction of weight, always desirable in obesity, is sometimes accompanied by reduction of blood pressure. Tobacco raises the blood pressure slightly and is therefore theoretically harmful, but may be allowed in moderation in most cases; it may relieve nervous tension and promote relaxation. Coffee is usually permitted if it does not interfere with rest, but its use should be restricted because caffein reduces the renal blood flow.[44] Alcohol is not beneficial except in so far as it induces relaxation.

Protection of Vital Structures.—The cause of death in 1,264 patients with hypertension, as reported by different authors[17], was cardiac failure in 52.8 per cent, coronary thrombosis and sudden death in 13.6 per cent, cerebral vascular accident in 14.0 per cent, uremia in 8.5 per cent and other causes in 11.1 per cent. These figures emphasize the seriousness of the disease, but the outlook is not so dismal as it might seem; hypertension is usually well tolerated for many years and is serious only in its late stages. Nevertheless, certain reasonable precautions should help to postpone cardiac failure and cerebral hemorrhage. Even those hypertensive patients who are vigorous, active and free from symptoms should obtain adequate rest and refrain from strenuous physical activities. Violent exertion, competitive sports, cold baths and undue excitement are likely to cause transient pronounced elevations of blood pressure, and should be avoided. Reduction of weight lightens the demands on the heart. Measures for protecting against coronary thrombosis and uremia are less clearly defined. If angina pectoris develops, the usual treatment is indicated. Restriction of protein intake is not advisable unless renal failure has developed. A low salt intake is not necessary in the absence of edema, unless the recently proposed low sodium diet should prove practical.[21] Any lowering of blood pressure which can be achieved should retard the development of cardiac, cerebral or renal complications; when they occur the usual treatment is indicated.

In planning a program designed to protect against troubles not yet present, it is important not to alarm the patient unduly; anxiety and apprehension can be almost as distressing and incapacitating as organic disease.[2]

Relief of Symptoms.—Many individuals with hypertension are vigorous and active and have no complaints. The majority of hypertensive patients, however, present very definite symptoms, often quite resistant to treatment. The most common of these, occurring in approximately half of the patients, are irritability, headaches, dizziness, aches and pains, nervousness, insomnia and fatigue.[5,38] It has been suggested that these symptoms are due not to the hypertension but rather to vasomotor instability or psychoneurosis, chiefly because they are not closely related to the height of the blood pressure and may be relieved with little or no change in blood pressure and because similar symptoms are common in patients with hypotension or with vasomotor instability or psychoneurosis. Another group of symptoms, more suggestive of organic disease and occurring in less than one third of the patients, are dyspnea, nocturia and precordial pain.[38] Well-controlled studies have shown

that symptoms belonging to the first group are often relieved by bismuth subnitrate, potassium iodide, iodine, potassium bromide, phenobarbital and potassium thiocyanate[12], by psychotherapy[3] and by sympathectomy[35], usually without any significant alteration of blood pressure. The sedative drugs are useful in temporarily relieving nervous symptoms when they are prominent.[12] Symptoms belonging to both groups may be relieved by reassurance, psychotherapy, rest and restriction of activities, usually when the blood pressure is lowered, but occasionally when it is not altered. Dyspnea and precordial pain are often relieved by treatment of the heart condition which is causing them, even when the blood pressure remains unchanged. Relief of symptoms is desirable for the comfort of the patient, but is usually transient and does not, as a rule, indicate that the course of the disease has been modified.

Summary

Hypertension is considered from the standpoints of its cause and treatment. The available evidence suggests that in individuals predisposed by constitution or heredity a variety of stimuli, chiefly psychic, causes transient neurogenic vasoconstriction and transient hypertension, which tend to become more persistent. In this early stage little or no organic disease is present. The renal arteries participate in the neurogenic vasoconstriction. In time the renal humoral mechanism begins to function and the hypertension becomes well established. Eventually organic sclerotic narrowing of the renal arterioles develops and the disease has now entered the irreversible late stage. Psychotherapy, by minimizing the response to many stimuli or by eliminating them entirely, and sympathectomy, by interrupting the renal vasoconstrictor pathways, may check the disease in the early stage but are less effective in the later stages. Reassurance, psychotherapy, rest and restriction of activities often cause moderate reduction of blood pressure and tend to protect the heart and brain from the disasters which threaten eventually. Unfortunately there is no drug which is satisfactory for reducing the blood pressure; the thiocyanates are sometimes effective but, because they are somewhat dangerous, must be used with caution. Symptoms can often be alleviated by psychotherapy, rest, sympathectomy and such drugs as bismuth subnitrate, potassium iodide, iodine, bromides, phenobarbital and the thiocyanates even though the blood pressure is not altered.

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The Prognosis of Renal Tuberculosis, Treated by Nephrectomy

Outlook of the Patient Who is Considered Unsuitable for Operative Treatment

By Reed M. Nesbit, M.D.,† Walter A. Keitzer, M.D., and Jack M. Lynn, M. D.
Ann Arbor, Michigan



PROPER EVALUATION of treatment in genito-urinary tuberculosis requires several years of follow-up; and this report is concerned chiefly with the consideration of ultimate prognosis, and is an attempted analysis of various factors which might influence the final outcome.

Material considered as acceptable for this study consists of 260 cases of proven genito-urinary tuberculosis which have been followed for a minimum of five years, and includes those cases which could be traced and were diagnosed at University of Michigan Hospital between 1923 and the end of 1939. Survival periods are listed in years and fractions of years from the time of diagnosis in the unoperated cases, and from the date of surgery in those who were operated upon. The date of onset of symptoms was rather vague in many instances and was rejected as being too inaccurate for statistical purposes. Every included case had a positive diagnosis of tuberculosis; either positive smear, culture, or guinea pig inoculation for acid fast bacilli; or the pathologist's positive report on a surgical or biopsy specimen. All cases having nephrectomy had the diagnosis confirmed by microscopic examination. Every case presumed to be renal tuberculosis on the basis of clinical symptoms and signs, cystoscopic appearance of the bladder, or configuration of the lesion as demonstrated by pyelography, but which failed to fulfill one of the above listed criterions was discarded as being possibly some other disease process. Cases were accepted as having genital involvement if there was a positive biopsy or autopsy report, or a positive acid fast determination on sinus exudate; or if there was present typical long-standing epididymitis or beading of the vas deferens in a proven case of open renal tuberculosis; but patients who were found to have nodularity of the prostate by rectal examination, and who showed no other manifestations of genital involvement were excluded.

TABLE I. AGE AND SEX
260 Cases

Year	Number	Per Cent	Male	Female
0—10	2	0.8		
11—20	41	15.8		
21—30	75	30.0		
31—40	64	25.7		
41—50	44	16.9		
51 & over	28	10.8		
Total	260	100.1	184	76

Per Cent Male—70.8 Per cent Female—29.2
Oldest—83 Youngest—7 Average—33.8

Tabulation of age and sex in these 260 patients revealed nothing unexpected (Table I). In agreement with the reports of many other observers, these figures show the highest incidence in ages twenty to forty. The youngest patient was seven, the oldest eighty-three, and the average 33.8 years. There was 184 males and 76 females, or a ratio of about 2:1. This is in accord with the findings of Emmett and Kibler, but differs from the ratio of 1:1 recorded by Henline.

Enumeration of duration and character of symptoms reveals that pus in the urine and irritative bladder symptoms were present in approximately 80 per cent of the cases while about one-half of the patients complained of gross hematuria. Of especial interest is the observation that one-third of these individuals had organisms other than tubercle bacilli in the urine, and this fact has prompted us to suspect tuberculosis in every case of persistent urinary tract infection. The duration of symptoms before admission to the University Hospital varied from one month to 14 years with an average of 24.7 months.

Emmett and Kibler reported a definitely higher mortality in renal tuberculosis among males than among females; this they reasoned, was perhaps

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†Dr. Nesbit is Professor of Surgery at the University of Michigan. He has been in charge of the Section of Urology, University Hospital, since 1930.

TABLE II. SYMPTOMS AND URINARY FINDINGS

260 Cases

	Irritative Bladder Symptoms	Hematuria	Pain or Ache	Pus in Urine	Organisms Other than AFB in Urine	Duration of Symptoms Before Entry
Number	204	114	128	216	91	Minimum—1 Mo.
Per Cent	78.5	43.9	49.3	83.2	35.0	Maximum—14 Yrs.
						Average—24.7 Mo.

TABLE III. RELATION OF SURVIVAL TO SEX

260 Cases

		Living			Dead		
	Total	Number Living	Per Cent Living	Years Since Diagnosis	Number Dead	Per Cent Dead	Years of Survival
Male	184	58	30.4	11.6	126	69.6	4.0
Female	76	40	52.6	11.5	36	47.4	6.0

TABLE IV. RELATION OF SURVIVAL TO PRESENCE OF GENITAL LESIONS

184 Male Patients

	Total Number	General Incidence	Patients Living	Per Cent Living	Years Since Diagnosis	Patients Dead	Per Cent Dead	Years of Survival
Operation on Genital Tract	29	16.6	9	4.9	15.7	20	10.9	6.3
Unoperated Genital Complications	55	29.9	13	7.1	11.9	42	22.8	3.0
Genital Lesions Without Renal Complications	13	7.1	6	3.3	10.7	7	3.8	4.2
Total	97	53.6	28	15.2		69	37.5	
Renal Lesions without Genital Complications	87	47.2	30	16.3	16.0	57	31.0	4.2

due to the greater prevalence of genital involvement in the male. However, vital statistics demonstrate that the aggregate mortality of all forms of tuberculosis is higher in males than in females, and the assumption seems logical to us that genito-urinary tuberculosis only bears out the trend for this disease process to be more fatal among males.

Cases in the present series conform to this pattern when separated as to sex (Table III), in that 52 per cent of females were alive 11.5 years after diagnosis, while only 30.4 per cent of males survived as long. Application of the chi-square formula reveals that these figures are significant and in Table IV are analyzed the 184 male patients in this series. It should be reiterated that simple irregularity of the prostate was not considered proof of genital involvement, and more positive findings composed our criterions. Forty-seven and two-tenths per cent of renal lesions had no accompanying genital complications, but only 7.1 per cent of patients with genital lesions were free from renal involvement. The implication of this is perfectly obvious. Discovery of tuberculosis anywhere in the genito-urinary tract calls for a complete urological investigation.

Twenty-eight and nine-tenths per cent of the ninety-seven males having genital or genital and renal lesions are living; 34.5 per cent of eighty-seven patients with no genital complications are surviving after an average of fifteen years. These

TABLE V. OPERATIONS FOR RENAL TUBERCULOSIS
153 Cases

	No.	Operative Mortality	Cases Living	Per Cent Living	Years Since Operation	Patients Subsequently Dead	Per Cent Dead	Years of Survival
Nephrectomy	153	0.82	77	50.3	11.0	76	49.7	5.6
Ureterectomy	5	0	0	0		5	100.0	8.8
Nephrostomy	2	0	1	50.0	4.0	1	50.0	0.1
Incision and Drainage Perinephric Abscess	10	30	4	40	11.4	3	30	0.64
Ureterocutaneous Transplant	6	33	2	33	9.1	2	66	5.9

differences are of no statistical significance and the conclusion is not permitted that a genital complication adds to the mortality in urinary tract tuberculosis.

Most authorities hold the opinion that genito-urinary tuberculosis is part of a generalized systemic disease, and with this opinion we heartily concur. No operation, however, early undertaken or skillfully carried out will overnight cure a patient of tuberculosis. Every individual with urinary tract tuberculosis has his chest x-rayed; and if positive, none is operated upon in University Hospital until the internist in charge of tuberculosis judges the lung lesion arrested or stable enough to permit the safe performance of operation.

Following operation a minimum of six months' bed rest in a sanatorium is required of every patient undergoing operation for genito-urinary tuberculosis.

Before presenting statistics on the operated cases, a brief consideration of criterions for surgical treatment in renal tuberculosis seems in order. Patients falling into one of the following groups are considered candidates for nephrectomy.

1. Unilateral renal tuberculosis: (a) Those who have unilateral renal tuberculosis as evidenced by the presence of tubercle bacilli and pus cells in the ureteral specimen of urine irrespective of roentgen signs of destruction or irrespective of irritative bladder symptoms, provided there is no active extra urinary tract focus to deter operation. (b) Cases with quiescent or controlled pulmonary or osseous tuberculosis and who have unilateral destructive renal tuberculosis which is progressing, which is of considerable extent, or which is accompanied by tuberculous cystitis.

2. Among patients who have bilateral renal tuberculosis, removal of the worst kidney is at times indicated though certainly the prognosis is less favorable in this than in the unilateral case.

Such a situation is well illustrated by Mrs. I. P., a white female who was first seen in University Hospital on May 27, 1937, complaining of pain in the right flank, burning on urination, urgency and nocturia. At that time she was found by retrograde pyelography to have a destructive lesion on the left, and a questionable small abscess cavity in the right kidney. The urine from each kidney contained pus and tubercle bacilli that were identified by guinea pig inoculations. Left nephrectomy was performed on May 28, 1937, followed by a six months' period of sanatorium care and continued program of rest at home. Irritative bladder symptoms have disappeared even though repeated analyses of urine obtained by ureteral catheter from the right kidney have been positive for pus and tubercle bacilli. When last seen on February 9, 1945, the patient felt fine and had no urinary symptoms despite a secondary bacillary infection of the bladder; 0 to 2 pus cells per oil immersion field in urine from the right kidney and pyelograms which were unchanged since 1937.

3. Operation in the face of active, unstabilized pulmonary tuberculosis is permissible in two instances: (a) In far-advanced renal tuberculosis which is producing unbearable pain, uncontrollable sepsis, or dangerous hemorrhage. (b) In rare cases in which the phthisiologist feels that an active genito-urinary focus is retarding the progress toward healing of a lung lesion.

Operative treatment was carried out in 153 of these 260 patients (Table V). Operative mortality was gratifyingly low; one death in 122 nephrectomies performed at the University of Michigan. The prognosis of tuberculous perinephreic abscess is not good: the operative mortality was 30 per cent in our experience, and 30 per cent of survivors lived less than one year. However, 40 per cent lived to have subsequent nephrectomy and their survival period was no different from those who had primary nephrectomy for tuberculosis limited to the urinary tract.

TABLE VI. FACTORS INFLUENCING SURVIVAL AFTER OPERATION

156 Cases

	Living			Dead		
	Number	Per Cent	Years Since Operation	Number	Per Cent	Years of Survival
No extra-urinary tract focus	46	29.5	10.7	29	18.6	6.9
Active or far-advanced pulmonary tuberculosis	8	5.1	10.8	9	5.8	2.6
Extrapulmonary focus	26	16.7	11.5	38	24.4	5.3
Total	80	51.3	11.0	76	48.8	5.6

TABLE VII. CAUSE OF DEATH IN PATIENTS WHO DIED SUBSEQUENT TO NEPHRECTOMY

76 Cases

Foci of Tuberculous Lesions	Residual Genito-urinary Tuberculosis	Pulmonary Tuberculosis	T.B. Location Not Stated	Other and Unknown	Total
No extra-urinary tract focus	12	0	6	13	31
Active or far-advanced pulmonary tuberculosis	2	3	4	4	13
Extrapulmonary foci	12	3	8	9	32
					76

Two operative fatalities occurred during supravesical diversion of the urine for obstruction of the functioning ureter. Both of these patients had far-advanced hydronephrosis which developed subsequent to nephrectomy. These individuals might have survived much longer had the urinary diversion been accomplished earlier; and they illustrate the fact that pyelographic follow-up after nephrectomy for tuberculosis is important. Careful postoperative study becomes imperative where serious bladder involvement is present or where irritative bladder symptoms persist.

It was felt that some additional criterion for evaluating prognosis might be obtained by separating the cases into those which had only genito-urinary tuberculosis and those which had tuberculosis in other locations as well (Table VI). Of those patients with no demonstrable extra urinary tract foci, forty-six are living and twenty-nine are dead; while of the combined group of active and far-advanced pulmonary, genital, and orthopedic compilations, thirty-four are living and forty-seven are dead. These figures are statistically significant and the conclusion is permitted that an extra-genito-urinary tract focus of tuberculous involvement does add to the mortality. This analysis demonstrates very nicely though that a considerable group of patients with multiple tuberculous lesions can be salvaged, and that the mere presence of a pulmonary or a bone and joint complication certainly does not mean that a case is hopeless. True, such situations demand the intelligent co-operation of internist, orthopedist, and urologist; but the resulting benefit to the patient may be very gratifying.

Seventy-four patients who died subsequent to nephrectomy are listed in Table VII. Admittedly, the accurate determination of the cause of death in a series of patients dying outside a hospital is impossible; but of this group it is noted that a considerable number certainly succumbed to urinary tract disease, and the majority to tuberculosis in some form.

Table VIII records the survival of eighty-six cases in which a report on the guinea pig inoculation of urine from the unoperated kidney was available. Of sixty-six individuals with no acid fast bacilli in the "good kidney," forty-seven are still alive, an average of ten years after operation; whereas of twenty patients in whom tubercle bacilli were demonstrated in the contralateral urine specimen only eight are alive. This finding is

TABLE VIII. RELATION OF SURVIVAL FOLLOWING NEPHRECTOMY TO STATUS OF THE UNOPERATED KIDNEY

86 Cases

			Patients Living		Patients Dead		Cause of Death		
"Good Kidney"	Total No.	Years of Survival	No.	%	No.	%	Renal T.B. No.	T.B. Elsewhere No.	Other & Unknown No.
Acid-fast bacilli absent	66	10.0	47	71	19	29	4	10	5
A.F.B. present	20	8.4	8	40	12	60	4	3	5

TABLE IX. FACTORS INFLUENCING SURVIVAL— NO OPERATION

91 Cases

	Living			Dead		
	Number	Per Cent	Years Since Diagnosis	Number	Per Cent	Years of Survival
No extra-urinary tract focus	8	8.8	14.1	24	27.4	3.5
Active or far-advanced pulmonary tuberculosis	3	3.3	12.8	17	18.7	2.8
Extrapulmonary focus	6	6.6	9.2	32	35.2	2.4
Total	17	18.7	12.4(AV)	73	81.3	3.0(AV)

statistically significant; and while acid-fast organisms bilaterally do not necessarily contraindicate removal of the more severely damaged organ, such a finding certainly dictates a guarded prognosis.

There were ninety-one patients who had proven renal tuberculosis but who were not operated upon either because they refused nephrectomy when advised or else they were deemed inoperable. Originally the records of a few patients who refused operation were separated from those who were deemed inoperable, but the final outcome was the same for both of these groups so that the results were combined to form Table IX. The numbers in each division are so small that valid conclusions are impossible, but the fact that there are seventeen of these people living, an average of 12.4 years after diagnosis, is amazing in itself. Generally speaking, one can say that about 85 per cent of unoperated cases will be dead in three years or less but than an unpredictable few will defy the rules and overcome an apparently hopeless tuberculous infection. There are seventeen such hardy souls in our series; five report themselves well and carrying on all their usual activities, while eight state that they are not completely well but are improved over last visit to the hospital, and four are living but unimproved.

There remains to be considered the rather controversial subject of the so-called "non-surgical" case of renal tuberculosis. This term is applied to the situation in which the organisms of tuberculosis are shown to be coming from one kidney, where pyelography may reveal a destructive lesion; and yet by election no nephrectomy is performed. Opinion on this matter varies. There are those who maintain that this attitude should never exist in good urological practice while some contend that nephrectomy is usually not indicated in early lesions until some progression of the process has been demonstrated. It is felt, at the University of Michigan, that non-surgical cases do occur, but that they are few in number; and that they should demonstrate the following characteristics: (1) The individual should clinically have shown reasonably strong reparative power against tuberculosis; (2) he should be free from important bladder involvement; (3) the renal lesion should be of small extent, and (4) tuberculosis elsewhere, such as, a pulmonary or bone and joint lesion must be pres-

ent which in itself will keep the patient hospitalized and under close observation for a matter of years. Otherwise we feel that the surgeon is not justified in committing a patient to a sanatorium for years while watching a solitary focus of tuberculosis which could be removed. Furthermore, there is little evidence that an appreciable number of such cases will become arrested.

Five patients of the 260 fell into this "nonsurgical" category. Three are dead 2.4, 5.2, and 7.5 years after the diagnosis was established while one is living 5.8 years after diagnosis, and one, L. K., is living 9.4 years after right renal tuberculosis was proved. This last patient was first seen on the urology service, August 7, 1935, because of hematuria; and he was found to have far advanced pulmonary tuberculosis, bilateral epididymitis, and distortion of the lower major calyx on the right as revealed by pyelography. Guinea pig inoculation of both ureteral specimens however were negative. Roentgenological check-up in 1936, 1937, and 1938 showed persistent distortion of the pyelogram, deposition of calcium in the parenchyma of the right kidney between 1936 and 1937, and positive results upon guinea pig inoculation of right kidney urine. During these years he had a seven-rib thoracoplasty performed in six stages: first, second, third and anterior primary stages, and a first- and second-stage secondary rib resection. As reported by his local physician on January 19, 1945, he is alive, and his tuberculosis is quiescent. Only complaint listed was occasional shortness of breath.

Summary and Conclusions

Data are presented on 260 cases of genito-urinary tuberculosis which have been followed for a period of five years or more. It is pointed out that in this series, males are affected more frequently than females in a ratio of about 2:1, and that the urine in about one-third of the cases was secondarily infected by organisms other than the tubercle bacillus. A 50.3 per cent of nephrectomized cases are living an average of 11 years after operation, while 81.3 per cent of cases not operated upon have died in an average of three years. We were unable to demonstrate that an accompanying genital complication in the male adds to the mortality of renal tuberculosis, and we assume that the higher death rate among males is due to the higher mortality of tuberculosis generally in this group.

Three facts derived from these figures are proven to be statistically significant:

1. In nephrectomized patients, a lower rate of survival will be present in the group having acid-fast bacilli demonstrated by guinea pig inoculation in the urine from the unoperated kidney than in those with normal urine on the "sound" side.

2. In urinary tract tuberculosis the survival of females is greater than that of males.

3. The mortality rate of genito-urinary tuberculosis is adversely influenced by the presence of the bone and joint or pulmonary lesions.

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HYPERTENSION

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Dystrophia Myotonica

Report of Two Cases, with Associated Hyperostosis Frontalis Interna in One

By I. Donald Fagin, M.D., F.A.C.P.
Detroit, Michigan

DYSTROPHIA MYOTONICA is an inherited and progressive muscular dystrophy of relatively rare occurrence, although over two hundred cases have been reported. The American literature contains gratifyingly comprehensive reviews of the subject by Waring and Ravin[4,5,6,7,8], and the reader is referred to their interesting studies for details. In brief résumé, dystrophia myotonica is a myopathic disorder characterized by the occurrence of many or all of the following features:

1. *Myotonia,* or prolongation of muscular contraction beyond the time when the stimulus has ceased acting: the myotonia of this disease is usually most evident in the muscles of the forearm and hand, and may be produced by voluntary contraction, or by mechanical or electrical stimulation of the muscles. Myotonia generally decreases in degree after repeated contractions of the muscle, and is relieved temporarily by the administration of quinine, quinidine, adrenalin, or calcium. Emotional disturbances, cold, prostigmin, and potassium chloride usually increase the myotonia.

Myotonia, or muscular weakness and atrophy, usually is the initial complaint, and generally develops in the third or fourth decades.

Electromyographic studies[1] have indicated that difficulty in relaxation of a voluntarily contracted myotonic muscle is due to reflex (central) spasm of the prime movers and synergists.

2. *Hereditary Background.*—Careful studies of family histories of patients with dystrophia myotonica have indicated that the disease is transmitted as a single factor dominant, which is modified by "progressive inheritance," i.e., the onset of the disease occurs in earlier ages and increases in severity in successive generations. However, as has been pointed out[4], "because of the presence of progressive inheritance, on the one hand the parents of many patients may show little or no signs of the disease, and on the other hand the children of parents tend to develop the disease so early as to prevent further propagation, and the disease dies out in the family." In neither of the cases presented here was the hereditary factor evident either in the neuromuscular system or in the lens of the eye which usually exhibits characteristic changes as noted below.

3. *Cataract.*—The cataract begins in the posterior cortex of the lens, and lens changes are evident in almost all cases if slit-lamp examination is performed.

4. *Muscular Atrophy.*—The atrophy is progressive, and constitutes the most important characteristic of dystrophia myotonica. Most typically, the atrophy involves the muscles of the face and neck, the forearms, the extensors of the leg, and the dorsiflexors of the feet. The atrophy of the temporal muscles produces deep temporal hollows; the face becomes pinched, the cheeks sunken, and the term "hatchet-face" most appropriately describes the appearance of the patient in the late stages. As the atrophy progresses, the tendon reflexes diminish and disappear.

5. *Alopecia.*—Alopecia is a rather characteristic finding, occurring in about half of the reported cases.

6. *Endocrinologic Disturbances.* — Testicular atrophy and impotence are common in male patients, and frigidity and menstrual irregularities are common in female patients. A low basal metabolic rate is usually found. Because the theory had been advanced[2] that endocrine dysfunction might be responsible for the muscular changes in dystrophia myotonica, Rymer and Ravin[6] studied the glucose tolerance tests in several patients with this disorder, since advanced dysfunction of the pancreatic insular tissue, anterior pituitary or adrenal cortex is commonly reflected in aberrations of carbohydrate metabolism; however, they found no significant difference in glucose tolerance between the patients and the controls. The first patient whose clinical history is recorded here had diabetes and a colloid goiter, suggesting that endocrinopathy may be an important factor.

7. *Late Changes.*—In the well-advanced stages of the disease, emaciation and psychic deterioration are common. Death usually results either from progressive asthenia or intercurrent infection.

From the Medical Service of the U. S. Marine Hospital, Galveston, Texas.

With the view of possibly aiding in the eventual clarification of this interesting disease, two additional case histories are herewith recorded.

Case Records

*Case 1.**—A thirty-five-year-old white married woman was admitted to the hospital on September 25, 1939, complaining of difficulty in walking of nine years' duration.

The patient's mother had died of carcinoma of the stomach at the age of forty-nine years. The father had had asthma, but died of injuries sustained in an accident. There was no history of muscular dystrophy in the patient's parents, and examination of the patient's sibling and the patient's daughter revealed no abnormalities.

When the patient was sixteen years old, she had noted slight swelling in the suprasternal area and had been told that she had a goiter; there had been no symptoms suggestive of thyrotoxicosis. A bilateral salpingo-oöphorectomy for the removal of a papillary cystadenoma of the ovaries was performed when the patient was thirty years old. Diabetes mellitus was discovered in 1936, when she was thirty-two years old, and was controlled solely by diet until 1938, at which time insulin was prescribed. A peripheral neuritis developed in 1938 and responded to intensive thiamin therapy. Fractures of the left radius and the right navicular were sustained as a result of falls in 1938; the fractures healed readily with the usual treatment. The menstrual history was normal, with the menarche at fourteen years and an asymptomatic menopause after the oöphorectomy. The patient had one child, a fourteen-year-old daughter. Venereal diseases were denied. The patient had been born in New York City and had lived there her entire life, working as a stenographer prior to her marriage. She did not use alcoholic beverages, tobacco, or drugs.

The present illness began in 1931, at which time the patient noted weakness and unsteadiness in the lower extremities resulting in frequent falls, and associated with vague intermittent needle-like pains in the legs and thighs. Weakness of the arms developed in 1933, and at about the same time the patient found that she occasionally had difficulty in opening her hands after having grasped an object tightly. The diagnosis of dystrophia myotonica was established in 1934, and the disease had been slowly progressive since its onset. In August, 1939, the patient was admitted to another hospital because of a three-month history of post-prandial epigastric pain and vomiting, and a weight loss of twenty pounds. The vomiting decreased in frequency as the diabetes was controlled with diet and insulin, and the gastrointestinal difficulties subsided gradually. The patient entered our institution primarily because of persistent weakness and difficulty in walking. Aside from anorexia, constipation, and occasional headaches and vertigo, the system review was not remarkable.

Physical examination revealed a severely malnourished and weak white female weighing only seventy-three pounds, about sixty-two inches in height, with a normal temperature and respiratory rate, and a labile pulse rate. The facial expression was querulous and typically "hatchet-face." The patient was alert and co-operative. There was well-advanced atrophy of the following muscles: masseters, temporalis, sternocleidomastoids, deltoids, rhomboids, pectoralis, glutei, and gastrocnemii. The facial muscles were weak, and there was bilateral foot-drop. Lumbar lordosis was pronounced. Myotonic contractions of the hands were readily elicited. All deep tendon reflexes were absent. The superficial reflexes and the cranial nerves were normal. There were no muscular fibrillations, and no sensory defects except for hyperesthesia of the calves and soles. The thyroid gland was slightly enlarged, and firm in consistency. The blood pressure was 114/78. General physical examination was otherwise not remarkable.

The red blood cells numbered 4.18 million per cubic millimeter, with 68 per cent hemoglobin. The white cell count was 6,500 per cubic millimeter, with a normal differential. The blood Wassermann test was negative. The urine was consistently sugarfree on a moderately high carbohydrate (200 G.) diet without insulin. The fasting blood sugar varied between 85 and 100 milligrams per cent. The blood urea nitrogen varied from 11.4 to 16.8 milligrams per cent. The basal metabolic rate was minus 24. Electrocardiographs and x-ray of the chest were not remarkable. An x-ray of the skull revealed hyperostosis of the inner table. Attempts to do a barium study of the gastro-intestinal tract were frustrated because the patient vomited the mixture. A barium esophagram was normal, and a gastro-intestinal series performed in August, 1939, at another hospital was reported to have revealed no organic lesion of the stomach, esophagus, or duodenum, although esophageal spasm was present. A phenolsulphonethalein excretion test was normal, with 62.5 per cent excretion in two hours.

There was slight intermittent elevation of the patient's temperature to levels of about 99.4 degrees Fahrenheit throughout the course.

Course.—The patient was given quinine ethyl carbonate, 0.5 gram twice daily, with pronounced improvement in the myotonia; however, persistent vomiting developed, and on November 4, 1939, the quinine was discontinued. The vomiting continued, and ketonuria developed which was attributed to starvation, since there was no glycosuria. Antispasmodics, intravenous fluids, and other symptomatic measures were of no avail. The patient failed gradually and died on January 1, 1940.

At postmortem examination, a scirrhous adenocarcinoma of the cardiac end of the stomach was found which tended to obstruct the cardia. The neoplasm infiltrated the tail of the pancreas, binding it to the stomach, and there was a metastatic nodule in the pelvis. Generalized muscular atrophy was present, and on microscopic examination degeneration of the muscle fibres was found, with hyalinization of individual fibres. The lungs showed slight atelectasis and edema. The pancreas exhibited marked sclerotic changes in the vessels, and patchy areas of fibrosis. The liver revealed marked

*The superintendent of the Goldwater Memorial Hospital, New York, N. Y., has granted permission to report this case.

fatty infiltration throughout but no metastases. The heart was hypoplastic (275 grams), and there were small atheromatous plaques on the mitral and aortic valves. The cardiac muscle fibres also exhibited atrophy. The

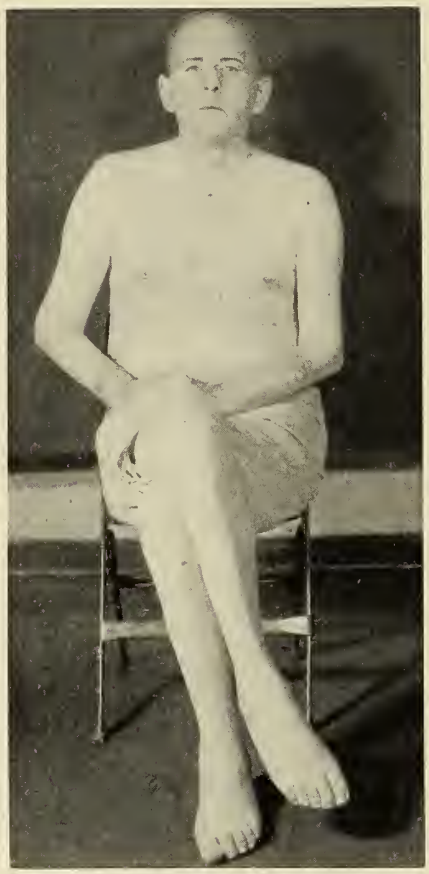


Fig. 1. Photograph demonstrates the alopecia, the temporal hollows, the atrophy of the pectoralis, sternomastoid, and deltoid muscles, the bilateral foot drop, and the pseudohypertrophy of portions of the deltoids (Case 2).

aorta exhibited slight arteriosclerotic changes. The genito-urinary tract was normal, except for a moderate cystitis and absence of the Fallopian tubes and ovaries.

The thyroid was enlarged, weighing thirty grams, and contained somewhat dilated acini, with flattened epithelium, and abundant colloid. The pituitary was of normal size, but there was an apparent increase in the number of eosinophilic cells. The frontal portion of the calvarium was very thick, measuring two centimeters on section, while the occiptal bone was 0.5 centimeter thick. The superior portions of the frontal inner table and the basal portion of the anterior fossa of the cranium exhibited hyperostosis. The other organs were not remarkable.

Case 2.—A forty-one-year-old American-born married white man was admitted to the U. S. Marine Hospital at Detroit, Michigan, on August 19, 1942, complaining of inability to walk of two and one-half years' duration, and a non-productive cough associated with slight dyspnea of two weeks' duration.

The family history was not remarkable, and there was no knowledge of cataract or neuromuscular abnormalities in any immediate relative.

The past history included measles, mumps, and pertussis in childhood, and frequent respiratory infections. Illnesses diagnosed by physicians as pneumonia occurred at the ages of two years, eighteen years, and forty years. At the age of twenty years the patient contracted gonorrhea, but denied having had lues. The surgical history consisted of a varicocelectomy at nineteen years, an appendectomy at thirty-three years, a fracture about the right ankle at thirty-four years, and excision of a sebaceous cyst of the face at thirty-five years.

The patient's social history was not unusual. He had completed two years of high school, was a laborer in a munitions factory before World War I, and worked at odd jobs from 1918 until he was incapacitated by his present illness in 1939. He smoked two to three packages of cigarettes daily, and indulged in an occasional highball.

The present illness began in December of 1918 when the patient noticed weakness of the right thumb. The weakness progressed, involving the muscles of the right hand and forearm, and the left hand and forearm during the following year. At that time (1919), he first noticed difficulty in relaxing the fingers after clenching his hands. Slight atrophy of the forearm and hands was noted about 1920 or 1921, but there was no involvement of the lower extremities until 1924, when weakness of the legs became apparent. Weakness of the upper and lower extremities, with prolongation of the contraction of the muscles of the hands and forearm persisted to the patient's admission to the hospital. From 1939, the weakness of the legs was of such degree that the patient was unable to walk.

Cardiovascular system.—Since 1938 the patient had noted intermittent episodes of irregular palpitation associated with dyspnea, generally initiated by exertion, and sometimes accompanied by dependent ankle edema. During one of these episodes, an electrocardiogram had revealed auricular fibrillation and left deviation of the electrical axis. The patient had taken digitalis intermittently since 1938 for control of these attacks, with partial success.

Respiratory system.—The patient had a long history of frequent upper respiratory infections, usually not incapacitating him, associated with cough and dyspnea, the most recent episode having started two weeks prior to entry.

Genito-urinary system.—There had been progressive decrease in libido during the course of the disease, especially since 1939.

Other systems were normal, except as noted in the history.

Physical examination.—The patient was a moderately obese white man, appearing chronically ill, rational, and oriented, but with a rather demanding and irritable personality. The head exhibited almost total alopecia. The neck was normal; the thyroid was not enlarged. Ex-

ternal ocular movements were normal, but the pupils, although equal, round, and regular, did not react to light and accommodation. No abnormality of the fundi or lenses was detected by ophthalmoscopic examination. Ears, nose, and throat were normal. Examination of the lungs revealed scattered inconstant, loud, high-pitched musical rales (rhonchi), and a few fine moist rales at both bases posteriorly; breath sounds, voice sounds, and percussion notes were normal. The heart was not enlarged and no murmurs or thrills were detected; the sounds were of good quality, and the second sound at the apex was split. The rhythm was regular, of sinus origin, and the blood pressure was 122/68. The abdomen was normal except for an old scar in the right lower quadrant. The rectum and genitalia were normal.

Neuromuscular examination indicated a generalized decrease in motor power. Myotonia was evident most characteristically when the fist was clenched, the patient being unable to open his fist readily, although there was no resistance to passive extension of the fingers. Myotonia was present in other motions of the upper extremities (flexion at the wrist and elbow), but was not present in the lower extremities. There was atrophy of the muscles of the hands, forearms, and arms, of the pectoralis muscles, the rhomboids, the temporal muscles, and the gastrocnemius muscles. A pseudohypertrophic appearance of portions of the deltoid and gastrocnemius muscles was present (see photographs). No fibrillations were apparent. All deep reflexes were absent, and bilateral foot drop was present. Superficial reflexes were normal. Sensory perception was intact in all modalities.

Laboratory data.—Routine urinalysis and blood count were normal, but the sedimentation rate was 25 mm. in an hour. The blood Kahn was negative. The basal metabolic rate was minus 4.

The urinary creatinine excretion was 1.026 G. per cent (normal 1-1.5 G. per cent), and creatine was present in the urine in a concentration of 0.204 G. per cent.

Roentgenologic examination of the chest revealed peribronchial infiltration in the right middle lobe and some plate-like areas of atelectasis. The appearance suggested the residue of some parenchymal inflammation, and the possibility of bronchiectasis.

Course.—The patient's hospital stay was afebrile and uneventful. Treatment consisted primarily of measures directed against the chronic bronchitis (rest, sedative cough mixtures, steam inhalation, and postural drainage). The maintenance dose of digitalis was continued. The chronicity of the myotonia, and the repeated failure of variegated therapeutic regimes in the past discouraged us from attempts to treat the primary disease. We would have liked to have tried quinine in this patient, since he had never received that drug and it had been found of great benefit in relieving the myotonia in the patient previously described who had been seen two years previously. However, restriction then current on quinine precluded its use. The patient was discharged on August 31, 1942.

Final diagnoses.—(1) Dystrophia myotonica; (2) chronic bronchitis; (3) cardiac disease, paroxysmal auricular fibrillation, etiology undetermined.

Comment

The first history recorded here is of particular interest because of the association of hyperostosis frontalis interna with dystrophia myotonica. Hyperostosis frontalis interna, or metabolic craniopathy, has been reviewed recently by Knies and LeFever[3] and is a syndrome with endocrine, metabolic, and neurologic changes associated with alterations in the bony structure of the skull, and appears to be closely related to pituitary dysfunction. The syndrome is uncommon in the male as compared with the female, and ovarian insufficiency is suggested as a possible pathogenetic factor by the prominent incidence of castration and menstrual abnormalities in the female cases recorded in the literature. Of twenty-three females with metabolic craniopathy reported by Knies and LeFever[3], four had been castrated by surgical procedures or irradition; a similar history was present in the first case presented here.

Metabolic disturbances and neuropsychiatric disorders are common in hyperostosis frontalis interna, and the association of this syndrome with dystrophia myotonica in the first patient suggests the possibility of a common endocrine denominator. It would be of interest to determine whether the association here was merely coincidental, or whether it is of frequent occurrence.

Summary

1. The clinical features of dystrophia myotonica are briefly reviewed.
2. The clinical histories of two patients are recorded in one of whom hyperostosis frontalis interna was found.
3. The possibility of a common underlying defect in dystrophia myotonica and hyperostosis frontalis interna is suggested.

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Some Newer Uses of Roentgen Therapy

By Harper G. Sichler, M.D.
Lansing, Michigan



In the past few years, therapeutic doses of x-rays have been found to be very useful in the treatment of many inflammatory and glandular diseases which are often refractory to the older and more usual methods of medical treatment. It must, however, be frankly stated, to begin with, that the exact method and mechanism by means of which small doses of x-rays affect inflammed tissues so as to stimulate the healing process is not definitely known. It is the majority opinion, however, that the local destruction of lymphocytes and other white blood cells caused by the x-rays results in the liberation of lymphocyte antibodies and other antibacterial substances into the surrounding tissues.[6] X-rays have no direct antibacterial action, except in very large doses.

In general medicine this property of small x-ray doses of stimulating the healing of acute or chronic infections has been found to be very useful in treating carbuncles, cellulitis, and boils, which can often be aborted or greatly shortened in their course by two or three small doses a few days apart.[6] In a similar manner, acute infections of several internal organs, especially the brain and lungs, can be treated with good results, and Portmann[7] at the Cleveland Clinic has recently reported 60 per cent cures and 30 per cent improved in fifty cases of encephalitis which were treated within two months of the onset of the disease. As many of these diseases do not respond well to penicillin or the sulfa drugs, this is really a useful method of treatment.

In diseases of the ear, nose and throat, many uses have been found for this radiation effect on inflammatory disease:

1. In acute otitis externa and furunculosis of the auditory canal, small x-ray doses are usually quite effective in relieving the acute pain and clearing up the infection.[6]

2. In acute and chronic otitis media and mastoiditis, repeated small doses will often clear up an infection which has not responded well to penicillin or the sulfa drugs.[6]

3. In chronic hyperplastic sinusitis, relief of pain and discharge can often be obtained when the more usual sinus treatments are not fully effective.[5] In acute sinus infections radiation therapy is not generally indicated, because the most pressing requirement in these cases is adequate and complete drainage of the infected area.

4. In pyogenic cervical adenitis of infants and children small x-ray doses are very helpful in quickly reducing the pain and swelling.

5. Besides these uses in inflammatory diseases, the long-known great sensitivity of lymphoid tissue to radiation can be used to great advantage in treating recurrent adenoidal growths in the nasopharynx in children, and in relieving blocked eustachian tubes in adults resulting from hyperplastic lymphoid tissue around the eustachian orifice in the nasopharynx. It has been shown, by Hawley[3] that four moderate doses on alternate days will shrink down these hyperplastic lymphoid nodules very rapidly. Local radium applications to the nasopharynx can also be used for this purpose, but with some resulting discomfort for the patient. This type of treatment is often effective in relieving the symptoms of tinnitus, roaring, et cetera, which result when the eustachian tubes are chronically blocked by adenoid tissue or by swelling produced by a chronic infection in or around the tube.

In pediatrics, a common lesion for which x-ray therapy is now more widely used, is the various types of hemangiomata. Until a few years ago local radium treatment was generally believed to be the best treatment for these lesions, although it has long been known that x-rays and the gamma rays from radium have identical action on all tissues when used in equivalent doses. As has been pointed out by Prouty[8] and others, radiation with x-rays is now the method of choice, because a more homogeneous, better-controlled, and less penetrating dosage is possible with modern shock-proof apparatus. The preference for radium developed in the period of open x-ray tubes, when it was difficult and dangerous to treat babies rapidly and accurately. By giving repeated moderate doses (300-400 r) at intervals of two or three months, nearly all hemangiomata can be cleared up very successfully. Care must be exercised to avoid over-

dosage in treating lesions over the epiphyses of the long bones, to avoid future stunting of their growth. Treatment should preferably be begun before six months of age, as the endothelial cells composing these tumors are then most sensitive to radiation.

In orthopedics there are a few diseases which are helped by radiation therapy. Behrens[2] has recently emphasized the good results in subdeltoid bursitis, cervical arthritis, and related diseases of the neck and shoulder:

1. In subdeltoid bursitis, repeated small doses are often effective in acute and subacute cases, especially when there are calcium deposits in the region of the bursa or the insertion of the supraspinatus tendon.

2. In ankylosing spinal arthritis (Marie-Strumpell type), moderate doses to wide fields usually relieve pain but do not generally stop the progress of the disease.

3. In hypertrophic cervical arthritis a few moderate doses often relieve the painful symptoms.

4. Ganglia, if fairly soft and recent, will generally absorb after one or two large doses at monthly intervals. Old, hard ganglia are not much affected.

In gynecology, increasing use is being made of the stimulating effect which small doses of x-rays have upon the endocrine glands in the treatment of amenorrhea, dysfunctional uterine bleeding in young women, and in sterility due to female insufficiency. In cases of this type, small doses directed to both the ovaries and pituitary glands will often produce very satisfactory results.[9] This is an entirely harmless procedure if the proper small doses (50-70 r) are used. Besides these, there are of course several diseases of older women in which the inhibiting effect of larger x-ray doses on glandular and secretory tissue is made use of:

1. In functional or menopausal hypermenorrhea (hypertrophic endometritis), a complete artificial menopause may be induced by a sterilization dose which stops the menstrual activity entirely. The usual menopause symptoms, such as hot flashes, et cetera, usually occur afterwards, but they are no more severe than would occur normally later.

2. Uterine fibroid tumors of moderate size may be treated very successfully when surgery is refused or is not indicated. The fibroid disappears entirely or becomes very small in size, due to the direct action of the radiation on the fibroid tissue and the removal of the ovarian stimulus.

3. In endometriosis, pressure symptoms are relieved after a sterilization dose, due to removal of the internal secretory ovarian stimulation on the ectopic endometrial tissue.

In the treatment of malignant diseases there are only a few relatively new uses of Roentgen therapy:

1. In pituitary tumors the best therapeutic results have been obtained from intensive irradiation therapy.[4] The chromophobe adenomas, which compromise 80 per cent of pituitary tumors, are sensitive to large radiation doses. Results must be judged by improved visual fields and loss of headache. The acidophile tumors which cause giantism and acromegaly are more sensitive to radiation than the malignant chromophobes and should always be treated by radiation therapy. Results in both groups are better than with surgery, so that adequate irradiation therapy is the treatment of choice. It should not be used only as an adjunct to surgery, as pre-operative or post-operative therapy.

2. In breast carcinomas, especially moderately advanced cases, pre-operative x-ray therapy given over a two weeks' period one month before surgery appears to result in 10 to 15 per cent better late results.[10] This should preferably be followed by the usual postoperative series.

3. In late, advanced, ulcerating breast cancers, remarkable palliative results can be obtained, with clearing and healing of the ulcerated areas in most cases. This is especially true in older women with cancers of the slowly growing type who are in poor general physical condition and are not good surgical risks.

4. In uterine carcinoma, combined irradiation therapy with deep x-ray and radium is still giving the best therapeutic results. In cervical carcinoma, the x-ray series is preferably given first, followed by local radium in four to six weeks.[1] In fundus carcinoma, the best results are obtained by hysterectomy six weeks after an adequate series of x-ray treatments to the pelvis have been completed.

Summary

Small doses of roentgen rays have the property of stimulating the healing of most acute and chronic infections, and this quality can be made

use of very advantageously in the treatment of many diseases which often respond poorly to penicillin or the sulfa drugs. The great sensitivity of lymphoid tissue to irradiation has resulted in the increasing use of x-rays for the treatment of recurring adenoidal and tonsillar growths in the throat and nasopharynx, and in the treatment of blocked eustachian tubes resulting from chronic infection or lymphoid hyperplasia.

Small x-ray doses also have a stimulating effect upon the glands of internal secretion, especially the pituitary and ovary, while larger doses have an inhibiting or destructive effect upon all glandular tissues, which are more sensitive to radiation than other body tissues, except lymphoid tissue.

Most malignant diseases of the external body surface and a relatively few internal malignant diseases, especially those of the pituitary gland and the uterine cervix, are preferably treated by irradiation alone, while most other internal cancers, especially those of the breast, are preferably treated by a combination of surgery and irradiation.

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301 Seymour Ave., Lansing 15, Mich.

MSMS

LESS BED REST FOR THE AGED

A number of problems are involved in the progressive aging of the people of this country. The number of persons sixty-five years old or older has increased five times as rapidly as the general population in the last ten years. They now number more than nine million. They require far more medical attention and hospital care than the average. Dublin states that while the rate of invalidism at all ages is eleven per thousand, it is 53.5 per thousand at ages sixty-five to seventy-five.

It is now generally recognized that prolonged rest in bed may be harmful. Curtailing this period will not only relieve hospital congestion but benefit the patient. Dr. J. F. Norman in *Minnesota Medicine* (Vol. 28, p. 803) advocates application of this principle to the aged especially. He found that among 4,000 patients admitted to two hospitals, the average stay was 9.83 days; while for those sixty-five and over, it was twice as long. After long rest in bed, blood clots are likely to form. As the circulation grows feebler, hypostatic bronchopneumonia often sets in and leads to death. Wound healing is more rapid with early rising after operation, and wounds have fewer ruptures. Shortening the stay in bed has a very important psychological benefit. It inspires hope in the elderly patient that he is going to get well and thus aids recovery.

HEALTH OF EUROPEAN CHILDREN

The health of European children has been seriously threatened by undernourishment under the six years of German occupation. One quarter of all children in the lower grades of schools throughout the Republic have tuberculosis and another 50 per cent are threatened with that dread disease. Deaths from tuberculosis in 1944 were nearly twice the number in 1938. The incidence of tuberculosis seems to increase in spite of all efforts to control it. The chief need is for really adequate nourishment, which is simply unattainable as yet, even with the help of UNRRA and the private American relief agencies which are helping to the full extent of their resources.—Dr. A. Prochazka, The Czechoslovak Minister of Health, Report to Parliament, Jan. 30, 1946.

DOROTHY THOMPSON SEES DANGER IN HEALTH BILL

(Continued from Page 466)

I myself am in a group insurance which provides hospitalization for my whole family for $24 per year.

Co-operative medical schemes are voluntary, efficient, cheap of administration, and cheap for the participants and could be standardized on a high level. State schemes are bureaucratic, heartless, and open to dangerous collusion between assembly-line physicians and patients at the public cost—as those know who have lived under them. The novelists are the best reporters. Those who think this proposal is "progress" should read "How Green is my Valley"; "Little Man What Now?" and "Karl and the Twentieth Century" for light.

Self-employed (farmers, for instance) are to pay 5 per cent of their incomes. On $3,600 that is $180 per year, or nearly 50 cents a day!

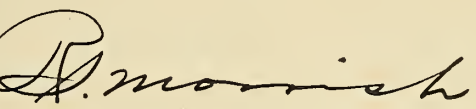
Ordinary bouts of sickness in the average family can be dealt with; the real crises are those that require hospitalization and surgical services, and these usually occur only a few times in one's life. Even as an individual, without benefit of group insurance, one can provide for a limited amount of miscellaneous services, operation costs, and 70 days of hospitalization for as low as $17 per year—depending on age and state of health—through private insurance companies.

Barnum said that a sucker is born every minute. Along with the sucker is born a politician, and nowadays a "progressive" to beat his drums for every measure that extends the power of the state, even into the most intimate parts of life.—Reproduced by special permission of Philadelphia Bulletin and Bell Syndicate from *The Evening Bulletin,* Philadelphia, December 21, 1945.

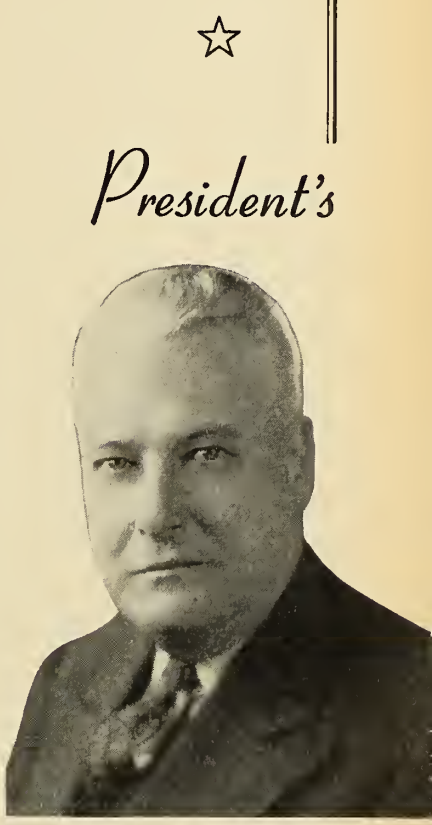
Michigan's Part in the Control of Cancer

Cancer still remains well up toward the top as a cause of death. Long looked upon as a hopeless disease by both profession and the public it has now been conclusively shown by careful observation that it is neither hopeless nor incurable. True, the exact cause of cancer is not known, but many causative factors are understood, including growth tendencies, and the part which parental influence plays, and it is also slowly being determined what types of internal environment have to do with cancer formation. It was wisely stated centuries ago that, "It is idle to speak of the cure of a disease until its cause is understood." Rather than to claim we are curing cancer, perhaps it would be better to admit that our progress has just reached the stage whereby we can often remove a malignant growth from the body, retard its development or postpone its appearance, but mankind will still be faced with the likelihood of a high rate of incidence until we come to know how growth within the body, both normal and abnormal, is controlled. Up to the present time surgical removal and radiation, combined with early diagnosis, offers the best means of controlling the disease, but other factors more potent of success will sometime be found. Research, and the funds for its maintenance is the crying need to find the solution. This requires the combined effort of scientists, and public-spirited citizens who are willing to provide the capital necessary to carry on constant study and search.

Michigan is doing its part. The Medical Society has a very active cancer committee which has made its efforts felt in a very practical way. Individuals, not of the profession, but who are our neighbors, are rendering noble service in making the dissemination of present-time knowledge about cancer to the public and profession where it will do the most good. Such a demonstration of service and good will appeared in an all-day meeting of several of the nation's outstanding authorities on cancer in Flint on March 20. Such meetings are a credit to the individuals and society who make them possible and they may well be repeated at frequent intervals.



President, Michigan State Medical Society



President's Page

Editorial

A MEDICALLY SPONSORED NATIONAL HEALTH PROGRAM

FOR MANY MONTHS we have advocated that the best way to sidetrack the Truman-Wagner-Murray-Dingell Socialized Medicine program is to propose something better; at least to advocate something that is an improvement, something that is beneficial to the people. Just opposing a program that someone else has proposed will not be sufficient.

The profession has agreed on a program that can be supported without insult to our professional ideals, and which will solve the increasing demand for a national medical service policy. For several months we have published the resolutions adopted at Chicago, December 2, 1945, by the National Conference of Presidents and Other Officers of State Medical Societies. These resolutions represent the work of representatives of many state Medical Societies, and were adopted by the House of Delegates of the American Medical Association, but referred to a committee for six months' study.

We now urge the prompt support of this plan, and the substitution of these principles for the proposed compulsory insurance plan now being considered in Washington. The necessity for prompt action is emphasized by the hearings now being held on the Wagner-Murray-Dingell Bills in Washington. It may now be too late, as we suggested long ago. For further emphasis, we again publish the resolution on page 438.

COMPULSORY HEALTH INSURANCE IN GREAT BRITAIN

WE ARE REPEATEDLY being told that the British Medical Association are in favor of compulsory health insurance. That statement is being made by our government representatives, Altmeyer, Wagner, Murray, Dingell, et cetera and by the representatives of labor. The statement was repeated at the Conference on Medical Services held in Chicago, February 10, 1946.

Most of our readers, and the general public to whom the statement is made, have no way of determining the truth. The *North Carolina Medical Journal* for February, 1946, effectively squelches that misleading statement, but the distribution of the true story is too narrow. We are repeating it here for your information.

Fundamental Principles of the British Medical Profession

In the interests both of the public and of medicine the profession regards the acceptance of the following principles as essential:

1. The medical profession is, in the public interest, opposed to any form of service which leads directly or indirectly to the profession as a whole becoming full-time salaried servants of the State or local authorities.

2. The medical profession should remain free to exercise the art and science of medicine according to its traditions, standards, and knowledge, the individual doctor retaining full responsibility for the care of the patient, and freedom of judgment, action, speech, and publication, without interference in his professional work.

3. The citizen should be free to choose or change his or her family doctor, to choose, in consultation with his family doctor, the hospital at which he should be treated, and free to decide whether he avails himself of the public service or obtains independently the medical service he needs.

4. Doctors should, like other workers, be free to choose the form, place and type of work they prefer without Governmental or other direction.

5. Every registered medical practitioner should be entitled as a right to participate in the public service.

6. The hospital service should be planned over natural hospital areas centered on universities in order that these centers of education and research may influence the whole service.

7. There should be adequate representation of the medical profession on all administrative bodies associated with the new service in order that doctors may make their contributions to the efficiency of the service.—*British Medical Journal,* Dec. 15, 1945.

Further evidence that the British Medical Profession is not happy with the conditions under which they are being restricted is contained in a dispatch to the *Detroit Free Press* of March 9, 1946:

LONDON—(U.P.)—The British Medical Association Journal threatened a "doctor's strike" if the Labor Government's new public-health scheme contains "objectionable" restrictions on private practice.

The liberal *Evening Star* promptly retorted that the Medical Association represented a "die-hard element" among doctors and was engaging in "what looks like obstruction."

"Every one sympathizes with doctors facing complete reorganization of their noble profession," the *Star* said editorially, "but most of them know that the old system is not in keeping with modern needs and that real state service must be evolved."

The Government's health bill has not been introduced yet in the House of Commons.

DOCTORS FOR RURAL AREAS

A GENERATION ago young doctors, after graduation, frequently settled in small towns or rural communities, where a practice could be easily and quickly built. They stayed a few years, and after accumulating a competence, moved to the city of their choice. This is not being done now to any extent. Young doctors coming out of our superb medical schools, and having spent a year at least in hospital training are remaining in the cities and are rapidly acquiring a practice.

The need for doctors has advanced faster than the supply. The war has intensified all this, made the need acute, and the opportunities more demanding. We actually have a shortage of doctors at a time that people are demanding more attention. The young doctors have a modern medical training, with hospital experience, and are accustomed to have everything at hand that they may need. They are coming out of the military forces with training in use of every conceivable modern appliance. Naturally they are not going back into practice where they will have to do without the "conveniences" they have been trained to use, and have become accustomed to use, and which patients demand.

The returning veterans are settling in the cities they have longed for, in the cities with hospitals, laboratories, consultants. Veterans believe they cannot give their best service under any other circumstances, and there are plenty of opportunities in the larger communities. No one can blame them.

At the 19th Annual Conference on Medical Service held in Chicago February 10, 1946, J. S. Jones, Secretary, Minnesota Farm Bureau, and Chairman, National Committee for Rural Health, suggested that if the government sincerely wishes to help the rural areas in health matters it should in some way subsidize farm boys in the study of medicine. Their tuition and expenses could be paid, and a plan made to supply an office which would make available to the young doctor a fully equipped working place, with x-ray, laboratory, nurse, three or four hospital beds, et cetera, so that he would have the necessities for the modern practice of medicine. In return for this education and equipment the young doctor would agree to stay in the rural area for a certain number of years. This would not be the same as the compulsory locating suggested by social workers and by the latest English plan.

This plan would supply needed service, and there are according to Mr. Jones many farm boys who would like to study medicine, but cannot do so under present conditions of increased costs, longer hours, and lessened chances to pay for one's education in the time-honored way of "working one's way through school."

EMIC BIRTHS IN HOSPITALS

THE CHILDREN'S Bureau of the Department of Labor issued a news bulletin on January 27, 1946, boasting of the overwhelming percentage of beneficiaries of EMIC born in hospitals in comparison to all births in hospitals: 90.6 per cent of EMIC as compared to 76 per cent for all births. The 24 per cent of general births not in hospitals probably could not afford the hospitals, or did not have them available, but every one of the EMIC cases had a hospital available, and the bill paid by taxpayers.

To our mind the Children's bureau owes us an explanation of why its beneficiaries did not score one hundred per cent. Why did the 9.4 per cent not go to the hospitals? Was it because there were no hospitals, or was it that the hospitals did not wish to work with the bureau? 9.4 per cent is about one case in eleven, a sizeable number to have failed to take advantage of a well-understood benefit. WHY?

The Michigan Department of Health anticipates a record number of EMIC babies in Michigan in 1946, judging from the fact that applications for federal government's Emergency Maternity and Infant care increased seventeen per cent in January over the previous six months' average. During the first thirty-two months of the program, 46,094 applications for care have been received, and *over $3,000,000 expended in Michigan.*

This is the EMERGENCY expedient of which we commented almost three years ago that "Nothing is so permanent as an emergency expedient." Our word has proven true, for the service has grown by leaps and bounds, and now it is proposed by the Pepper Bill (S1318) to extend this service to every woman no matter what may be

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. . . being LAZY is an art!

Most businessmen find it harder to be lazy than to work.

Being lazy is an art, worthy of cultivation, particularly by men who are working under great pressure.

May we suggest, that the first step in mastering the art is to get into the right mood with the **right clothes.**

Our sportswear, for instance. It is cut full and ample, to give you roomy comfort. Color blending is soothing . . . a combination of good taste that perks you up but doesn't knock you down.

WHALING'S
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★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

her condition of finance. To date this has been a hindrance to the extending and amplification of maternity care. The obstetricians have been advocating frequent prenatal visits of the pregnant woman to her doctor, starting with once a month, then twice a month, and during the final stages about one visit a week in many cases. The EMIC program prohibits more than five prenatal visits, and one postnatal examination. More may be done by the doctor, but must be free, under threat of punishment. Mr. Altmeyer claims the United States ranks seventh in maternal and infant mortality, and uses that argument for socialized medicine, under Truman, Wagner, Murray, and Dingell. That condition cannot be corrected, or maternity care become the great outstanding achievement of American Medicine if it must be hindered by drags of limited service. Our obstetricians must be allowed to practice as they believe best for the patient without threat of fine or punishment, or demand for free treatment.

ON THE RUN . . .

It has been demonstrated statistically and experimentally that restriction of caloric intake reduces the incidence of neoplasms.

* * *

The physician's medical interests are often conditioned by his own infirmities.

* * *

The hormonal response of prostatic carcinoma to estrogens seems to be lasting in less than 25 per cent of the cases, and is transient in 75 per cent.

* * *

Administered radioactive phosphorus is retained in greatest amounts in those organs of leukemic patients which are heavily infiltrated with leukemia cells.

* * *

There is increasing recognition of the possibility of virus infections in the mother maiming or killing the fetus in utero.

—Selected by W. S. Reveno, M.D.

ROASTED EGGS KEEP INDEFINITELY

Roasting eggs at a temperature of about 250 degrees is said to prevent decay indefinitely because all organisms inside the shell that might cause deterioration are destroyed. The tissue-like membrane enveloping the white is converted into an airtight covering; hence no germs can enter from the outside. Eggs thus processed may be kept at room temperature indefinitely without change in flavor, odor, appearance or nutritive value. The texture is a bit firmer than that of the ordinary hard boiled egg. It is expected that hospitals, schools, drug stores, and other establishments will make use of roasted eggs as they will save time and labor. Housewives will be less interested in them. Soldiers would not have tired of eggs preserved in this manner as they did of dehydrated or powdered eggs.—*Good Health,* April, 1946.

Say you saw it in the Journal of the Michigan State Medical Society



"It's a Boy!"

—and his life expectancy is brighter, and longer by 15 years —thanks to medicine's "men in white"

● Cold figures . . . with a warm, wonderful significance. Yes, the figures on increased life expectancy tell as much as a five-foot shelf of volumes on the amazing strides modern medical science has made in protecting and prolonging human life.



According to a recent independent nationwide survey:

MORE DOCTORS SMOKE CAMELS

than any other cigarette

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

NUTRITION SURVEY

Oakland County has been chosen by the Nutrition Section of the U. S. Public Health Service for one of a series of nutrition surveys planned for 1946. The Public Health Service unit carrying out the survey will have headquarters at the Royal Oak Health Center. The unit includes a medical officer, nutritionist, nurse, chemist and a clerk and is equipped to do routine laboratory analysis necessary in a nutrition appraisal.

ELECTRON MICROSCOPE ADDED TO LABORATORY

By June, 1946, the Michigan Department of Health's Bureau of Laboratories hopes to have its new $13,000 electron microscope which the state administrative board ordered in February. This electron microscope, the latest RCA model, coupled with new technics of preparing biologic specimens opens up many new fields of research.

It is possible to magnify the specimen 10,000 to 15,000 diameters directly in the microscope. The image of the specimen is recorded as a micrograph and by photographic enlargement the original micrograph can be blown up 10 to 20 times making possible a final enlargement of the object to 100,000 to 200,000 diameters. This compares with the greatest possible magnification with light microscopes of about 2,000 diameters.

The Laboratories' immediate intention is to follow purification processes in isolation of viruses. After a virus has been separated in pure form and identified it can be analyzed as a chemical substance to determine the basic nature of the infective material. Purified virus materials are also highly useful in specific immunologic studies.

In addition to facilitating study of virus diseases the electron microscope will contribute greater detail to study of the nature of bacteria as it reveals minute interior structure and surface details of bacteria that cannot be seen with light microscopes.

It is hoped that isolation procedures will eventually be precise enough to permit use of the electron microscope for diagnostic purposes.

LEGISLATURE APPROPRIATES FUNDS FOR NEW SANATORIUM AND ADDITIONAL SUBSIDY

The Michigan legislature in its extra session of 1946 appropriated $500,000 to begin the construction of a new state tuberculosis sanatorium in Houghton County. This money was appropriated for the Michigan tuberculosis sanatorium commission, in the amounts of $250,000 for each of the two fiscal years. Provision was made that any unexpended balance at the close of each fiscal year shall not revert to the general fund of Michigan but shall continue to be available for the purpose specified. The Act (Act 10, Public Acts of 1946) was signed by Governor Kelly, February 25, 1946, and given immediate effect.

(Continued on Page 518)

VITAL STATISTICS SUMMARY FOR THE YEAR

FIGURES FOR 1945 ARE PROVISIONAL

	Totals for the Year		
	1945	1944	5-year average
Births	111,637	113,586	113,940
Deaths	53,653	54,016	53,658
Infant deaths (under 1 year)	4,005	4,326	4,385
Maternal deaths (140-150)	162	198	257
Ten Leading Causes of Death During the Year			
Heart disease (90-95)	17,419	17,004	16,415
Cancer (45-55)	7,152	6,975	6,534
Apoplexy (83.1, 83.2)	5,147	4,794	4,740
Accidents (169-195)	3,420	3,350	3,785
Motor vehicle traffic (170)	1,194	1,103	1,479
Other accidents	2,226	2,247	2,306
Inflammation of kidney (130-132)	2,648	2,739	2,838
Pneumonia (107-109)	1,925	2,369	2,472
Tuberculosis (13-22)	1,761	1,748	1,770
Diabetes (61)	1,560	1,554	1,465
Premature births (159)	1,341	1,412	1,425
Hardening of arteries (97)	972	980	987
Certain Communicable Disease Deaths			
Diphtheria (10)	46	32	23
Infantile paralysis (36)	20	45	34
Influenza (33)	206	423	377
Measles (35)	10	49	46
Meningitis (epidemic) (6)	43	113	57
Scarlet fever (8)	9	7	23
Typhoid fever (1)	3	7	9
Whooping cough (9)	35	33	71

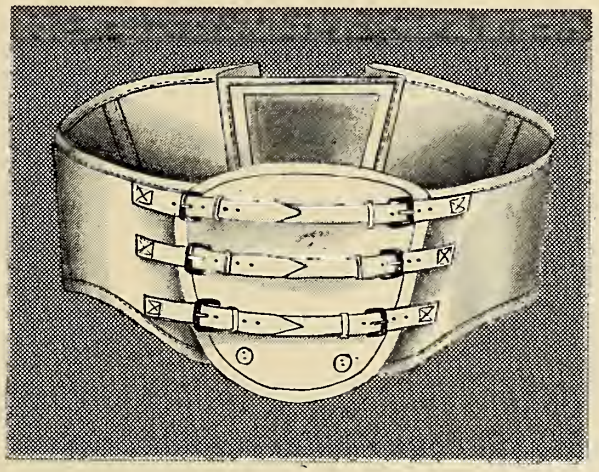
Figures in parentheses indicate International List numbers, 1939 revision.

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(Continued from Page 516)

Consideration was also given by the Legislature to the need for additional subsidy for counties with a high tuberculosis hospital load and a relatively low assessed tax valuation. Counties will of course continue to receive the $2.50 per patient day for all hospitalized public charge tuberculosis patients. In addition to this, Act 29 of the Public Acts of 1946 (Extra Session) provides that counties will receive additional subsidy for all patient days in excess of "20 patient days per $100,000 assessed valuation." This represents a change from the previous formula which stipulated that 40 patient days per $100,000 of a county's assessed tax valuation would be the point above which that county would begin to receive this additional subsidy.

* * *

INCIDENCE OF COMMUNICABLE DISEASE

Disease	*Feb. 1946*	*Feb. 1945*	*7 year-median*
Diphtheria	70	23	16
Gonorrhea	1202	1164	569
Lobar Pneumonia	82	136	337
Measles	7851	91	984
Meningococcic Meningitis	22	37	5
Pertussis	469	293	886
Poliomyelitis	1	1	2
Scarlet Fever	606	1208	1192
Syphilis	1384	1516	834
Tuberculosis	399	322	411
Typhoid fever	1	0	6
Undulant fever	5	6	11
Smallpox	0	2	4

MEASLES EPIDEMIC

Michigan's measles epidemic continued to gain at the rate of around 200 cases a day early in March. Between January 1 and March 8 a total of 14,066 cases was reported, compared with 243 for the same period last year. Physicians requested 3,182 vials of gamma globulin in February, more than had been distributed in the entire period since gamma globulin was first offered in March 1945.

Data from the past two summers' mosquito surveys are being assembled with the help of Michigan State College and the U. S. Public Health Service.

* * *

Edward F. Fisher, M.D., has been officially appointed as health director of the Dearborn City Health Department. He succeeds Dr. Littlejohn who has been acting director.

* * *

To be prepared to help cities interested in rat control, the Engineering Bureau recently sent one of its engineers to a U. S. Public Health Service school on rat control and eradication.

* * *

May Day, 1946, will be observed as Child Health Day with emphasis placed on immunization against diphtheria, smallpox and whooping cough. The advisability of consulting the family physician about modification of measles also will be stressed.

* * *

Morley B. Beckett, M.D., director of the Allegan County Health Department, on military leave since 1942,

(Continued on Page 520)



One capsule per month of Infron Pediatric provides adequate vitamin D for the prophylaxis against and treatment of rickets.

The rationale of this convenient and economical new method of vitamin D administration has been established clinically by the work of Wolf, Rambar, Hardy and Fishbein.

Each capsule of Infron Pediatric contains 100,000 U.S.P. Units of Vitamin D—Whittier Process—especially prepared for pediatric use.

Infron Pediatric mixes readily with the feeding formula, milk, fruit juices, or water, and can also be spread on cereal.

Supplied in packages of 6 capsules—sufficient dosage for 6 months. Available at prescription pharmacies.

REFERENCES:

Rambar, A. C., Hardy, L. M. and Fishbein, W. I.: J. Ped. 23:31-38 (July) 1943

Wolf, I. J.: J. Ped., 22:707-718 (June) 1943

Wolf, I. J.: J. Ped. 23:396-417 (April) 1943

Wolf, I. J.: J. Med. Soc. New Jersey, 38:436 (Sept.) 1941

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(Continued from Page 518)

has been released from service. He returned to Allegan county effective February 1. Dr. M. R. French was Acting Director of the Allegan County Health Department during Dr. Beckett's absence.

* * *

The Bureau of Engineering of the Michigan Department of Health is planning to carry on a tick survey in the Northern Peninsula this summer to determine whether the increasing number of ticks in that area includes the variety which carries encephalitis. It is believed that cattle shipped to Michigan for grazing and fattening have brought in the ticks.

* * *

Robert R. Scott, M.D., has been appointed director of the Mason County Health Department. Dr. Scott received his M.D. degree from the University of Michigan. He has been in private practice in Michigan for 19 years, and has been associated with both the Saginaw General Hospital and the University of Michigan Hospital. From May, 1942, until December, 1946, Dr. Scott was with the U. S. Army.

* * *

For the second year the Department has had the assistance of Michigan State College in preparing a garden edition of its monthly bulletin "Michigan Public Health." Emphasis is placed on better nutrition made possible by garden-fresh fruits and vegetables as well as the contribution which home gardens make in meeting worldwide food shortages. Copies are available to physicians not on the regular mailing list.

* * *

R. L. Loftin, M.D., has been appointed director of the Bay City and Bay County Health Departments. Dr. Loftin received his M.D. degree from Baylor College of Medicine, Dallas, Texas. He has had public health training at the University of Kentucky and at the University of Michigan. He spent nine months as a replacement health officer in the Pike County Health Department, Kentucky, and for the past five years has been director of the Harrison-Nicholas District Health Department at Cynthiana, Kentucky.

* * *

This summer the sixth state-wide pollen survey will be made by the Michigan Department of Health and daily ragweed pollen counts given to interested agencies and individuals. As in the past surveys about forty pollen-collection stations will be set up to cover all shore lines and representative inland areas. The surveys have consistently shown the Northern Peninsula to have appreciably less ragweed pollen than the lower peninsula. The peak of pollen contamination of the air usually occurs the last week of August or the first week of September.

* * *

John K. Altland, M.D., M.S.P.H., of the Michigan Department of Health, will become director of the Bureau of Local Health Services on April 1, 1946. He comes from the Barry County Health Department where he has been director since December, 1940.

Dr. Altland was born in White Pigeon, Michigan, in

(Continued on Page 524)

There is No Forgetting...

NO LAPSE IN ANTIRACHITIC PROPHYLAXIS

LIBBY'S Evaporated Milk—homogenized and fortified with at least 400 U.S.P. Units of Vitamin D per pint of evaporated milk—provides a quality milk for infant and child feeding.

The Vitamin-D content of this milk gives automatic prophylaxis against rickets. When used routinely, Libby's Evaporated Milk insures against any lapse in antirachitic prophylaxis due to oversight or temporary inability to obtain the vitamin in another form; it makes for constant and optimal Vitamin-D utilization, so necessary to growth and physical development.

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The added Vitamin D in Libby's Evaporated Milk adds nothing to its cost. Hence, the routine use of this milk minimizes to virtually nil the cost of antirachitic prophylaxis, and obviates the necessity for special Vitamin-D administration.

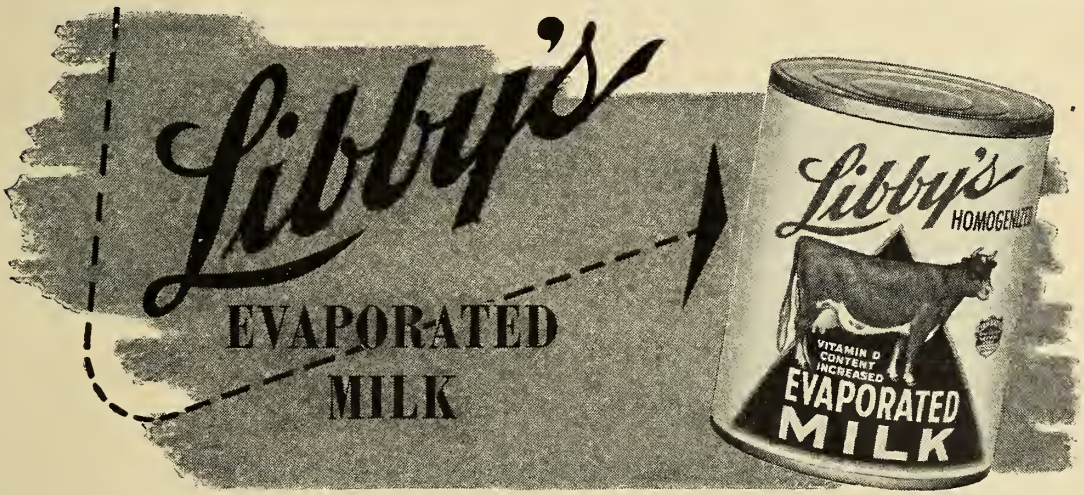
Note the analysis of this quality milk. Each can, containing 13 fluidounces, provides:

Calories	569	Phosphorus	0.82 Gm.
Protein	28 Gm.	Vitamin A	1762 U.S.P. Units
Fat	32 Gm.	Thiamine	0.19 mg.
Lactose	40 Gm.	Riboflavin	1.46 mg.
Calcium	1.02 Gm.	Ascorbic Acid	5.06 mg.
		Vitamin D_3	325 U.S.P. Units

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Woman's Auxiliary

STATE BOARD MEETING

Twenty-three members of the State Executive Board met at the Bancroft Hotel, in Saginaw, on January 8, for luncheon and the mid-year business session.

Our Honorary President, Mrs. Guy Kiefer, who always has inspiring words for us, was in attendance.

Mrs. L. C. Harvie, president, presided at the business meeting. The treasurer, Mrs. Robert L. Novy, reported a balance of $1,180.48 cash on hand, and U. S. Savings Bonds $1,000, U. S. Savings Bonds (Reserve Fund) $326.20, making total assets $2,506.68.

Report of the National mid-year Conference, which was held in Chicago in December, 1945, was given by Mrs. R. H. Alter and Mrs. Harvie, the Michigan delegates. Highlights of reports:

California uses Procurement and Assignment in reverse.

State presidents stressed keeping records of committee chairmen, which make for continuity in work.

Collection of sample baby foods from husbands' offices for war relief in Europe.

Stressed reviewing articles on legislation and public relations in medical journals.

Dr. Joseph S. Lawrence, AMA Executive Director of the Washington, D. C., Office, discussed the new Wagner-Murray-Dingell Bill and asked that we write him for information regarding medical legislation. He will gladly call upon our Congressmen in Washington upon our request.

Dr. Louis Bauer discussed the AMA Constructive Program for Medical Care (14 point program), and the Hill-Burton Bill. In regard to the WMD Bill, he said: "If every doctor would take a couple of extra minutes with his patients to explain what the whole thing will mean to them—we can defeat these measures."

Mr. F. V. Carghill, Circulation Manager of *Hygeia,* stated that the January issue carried 155,000 copies and it was hoped that this number would be boosted to 200,000 by the end of 1946.

Mrs. Milton Shaw, chairman of the Radio Speech Project, reported 100 schools had entered the contest this year and awards had been presented to the winners by Mrs. Harvie, on December 14, over station WKAR, East Lansing.

One new organization was reported—North Central Counties. Mrs. C. R. Keyport, Grayling, president, attended the board meeting.

The Saginaw County Auxiliary entertained the state board members at a delightful tea in the American Room, Bancroft Hotel, following the business meeting.

Hygeia Prize Winner.—St. Joseph County, Michigan—Second Prize in Group 1—$25.00. Congratulations!

* * *

National Convention—San Francisco, California—July 1-5. Auxiliary Headquarters will be at the Hotel Fairmont. All members are invited to a tea, to be held on Sunday afternoon preceding Convention. Make hotel reservations through Mrs. R. H. Hilton, c/o The Housing Committee, Room 200, Civic Auditorium, San Francisco, including date of arrival and departure.

* * *

State Convention—Hotel Statler, Detroit, September 24 to 26. All members are urged to attend. Registration opens September 24. Mrs. W. L. Sherman, Convention Chairman. Complete program will be published in later issue.

* * *

AMA RESOLUTION

The following resolution was presented by the House of Delegates of the A.M.A. to the Conference of the Woman's Auxiliary to the A.M.A., Chicago, December 6, 1945:

WHEREAS, the object of the Woman's Auxiliary is to aid the American Medical Association in every way requested, and

WHEREAS, the most urgent need at the present time is the widespread dissemination of knowledge concerning the hazards of current medical legislation.

THEREFORE, BE IT RESOLVED that the House of Delegates of the American Medical Association request the Woman's Auxiliary use every avenue possible to bring such information to its members and through them to the public.

This is the *second* resolution presented by the AMA to its Auxiliary—the first was regarding *Hygeia.*

MICHIGAN'S DEPARTMENT OF HEALTH

(Continued from Page 520)

1902. He graduated from the Flint High School and took his M.D. at the University of Michigan in 1928. He was in general practice for seven years, leaving that to take public health training at the University of Michigan. He received his M.S.P.H. from that institution in 1938 and accepted a Fellowship from the W. K. Kellogg Foundation. In 1939 he became director of the Grand Traverse County Health Department. From there he went to the Barry County Health Department which he leaves to come to Lansing.

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Correspondence

Editor,
Journal of the Michigan State Medical Society
Dear Sir:

Last Fall the doctors of the State of Iowa were presented with a plan for prepaid medical service to low-income groups based on the Michigan plan. In order to obtain a clear picture of the attitude of the doctors of Michigan toward their plan, I sent out a questionnaire to a hundred physicians. These were chosen by picking one from each county as near as possible and filling in the remainder of the names with doctors picked at random from the larger centers.

At this time I wish to express my gratitude to those doctors who took time off from their busy practice to reply to this questionnaire. Their suggestions and replies were very helpful to me and I think will be of considerable aid in promoting a similar plan in the State of Iowa. Frankly, I was somewhat opposed to such a plan in the beginning because I had worked in mining contract practice for five years and realized that such a type of practice is of a substandard variety regardless of statements made to the contrary by its advocates.

Some physicians ignore all questionnaires feeling that they are too busy to be bothered by them but when a doctor at his own personal expense sends out a questionnaire from which he can hope for no special personal gain either financial or through publicity, he is grateful to those who take the time to reply.

Sincerely yours,

ARTHUR E. PERLEY, M.D.

Waterloo, Iowa
March 13, 1946.
(See report of poll on page 448.)

Manila, Philippines

Michigan State Medical Society
Lansing, Michigan
Gentlemen:

At the outbreak of World War II, the Scientific Library of the Bureau of Science, an office under this Department, had one of the largest and best known collections of technical and scientific publications in this part of the Orient. This same library was destroyed by the Japanese during the war.

We shall appreciate it, therefore, if you will kindly help us in the task of building anew from scratch some such collection by donating to the library whatever publications you can spare now and in the future. Please send them addressed to:

Scientific Library
Bureau of Science
Manila, Philippines

Very respectfully,

JOSE S. CAMUS
Undersecretary

Jan. 31, 1946

Say you saw it in the Journal of the Michigan State Medical Society



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"Vitamin C plays a valuable role in the treatment of nasal allergy, but is useful fundamentally in large dosage ranging from a minimum of 250 mgs. daily with an optimum dosage of 750 mgs. daily."—L. Simon Ruskin, M.D., New York, N. Y., American Journal of Digestive Diseases, 12-281, 1945. "High Dosage Vitamin C in Allergy."

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In Memoriam

Gustave L. McClellan, Detroit, was born in Detroi in 1884. He was graduated from the Detroit College o Medicine in 1905, and entered general practice. A num ber of years later he specialized in diseases of the nose throat and lungs. He was on the staff of the Detroi Tuberculosis Sanatorium and of Providence Hospital Detroit, where he was chief of staff in 1935 and on th executive committee for a number of years. He wa also president of the Detroit Society of Chest Surgeon and of the Michigan Society of Chest Surgeons. H was president of the Wayne County Medical Society i 1942-43, and a member of the Board of Trustees whe he died. Dr. McClellan had been exceedingly active i the political-economic phase of organized medicine sinc 1935. He helped set up and was a member of the pro fessional Advisory Council of the Wayne County Socia Welfare Commission. Through his efforts, a medica co-ordinator for the Crippled and Afflicted Child Ac and other changes of legislation were established in th setup of the Wayne County Juvenile Court, many o which have been used as a model throughout the nation He also helped defeat the New Deal State Welfar Bill of the late thirties.

Gus, as he was fondly called by Detroit medical col leagues, was always a proponent of the private practic of medicine by the individual and always worked har against any encroachment by local, state, or Federal gov ernment into the field of medical care. An excellen orator and an expert rebuttalist, he was always in de mand as a speaker, especially by lay organizations inter ested in learning the facts about medical economic prob lems. His death is a sad blow to his colleagues i medical circles as well as to his many non-professiona friends and his family.—W.B.H.

HEART TRANSPLANTATION

Successful transplantation of hearts into warm-bloode animals, such as rabbits, cats and dogs, has been accom plished by Prof. Nicolai Sinitsin of the Gorky Medica Institute, Moscow.

The heart was transplanted onto the host animal's nec and put "in circuit" with the host's blood circulation sy tem. No ill effects were observed. Prof. Sinitsin is no carrying out long-term experiments for the purpose c keeping animals with two hearts alive as long as possibl At the same time he and his associates are conductin experiments for transplanting hearts into the abdome instead of the neck.

The work is expected to provide a valuable method fc studying various problems of heart physiology and trea ment of heart disease.—*Science News Letter, October 2 1945.*

Say you saw it in the Journal of the Michigan State Medical Society

YOU CAN'T OVERRATE THE VALUE OF CONTROL



Everyone can see the need for control measures against *obvious* dangers. But dramatic and constant campaigning is necessary to win public support in the fight against the unseen menace of cancer. Interest must be awakened and education conducted to enlist the public co-operation requisite to success. This challenging work is the responsibility of the Field Army of the American Cancer Society.

To give appropriate significance to these efforts and to focus nation-wide attention on this vital problem, Congress has designated April, "Cancer Control Month." And again this Spring, as in each drive spearheading the next year's activities, the Field Army's straightforward appeal to all Americans is: "GIVE, to Conquer Cancer."

Once more, over 10,000 Rexall Drug Stores across the country unite in behalf of this cause. Urging Americans to heed the Society's plea, these stores contribute facilities for distribution of literature cautioning "Consult your doctor" at the first moment of cancer's "danger signals."

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What's What

Fourteen counties of Michigan do not have any type of modern organized health department.

* * *

Lieutenant Colonel Benjamin H. Sullivan, Jr., M.C., of Detroit, formerly in the European Theater of Operations, has been assigned to the Historical Division, Surgeon General's Office.

* * *

Theodore Kolvoord, M.D., announces the association of Richard C. Norton, M.D., formerly Lieutenant Colonel, A.U.S., specializing in Radiology, Security Bank Building, Battle Creek.

* * *

Frederick C. Kidner, M.D., announces the association of John Gilbert Reid, M.D., in the practice of orthopedic surgery and the care of fractures, 1337 David Whitney Building, Detroit.

* * *

Roy D. McClure, M.D., Detroit, will address the Ohio State Medical Society at its Centennial Meeting in Columbus, on May 9, 1946. His subject will be "The Surgical Treatment of Bleeding Peptic Ulcer."

Floyd E. Armstrong, Professor Emeritus of Economics and Finance, Massachusetts Institute of Technology, was guest speaker at the Michigan State Nurses Association meeting, Pantlind Hotel, Grand Rapids, on April 26. His subject was "Dangers to the People's Health in the Wagner-Murray-Dingell proposal."

* * *

"Your Doctor Speaks" is the title of an educational health campaign in leading magazines sponsored by the Upjohn Company of Kalamazoo. The March message featured maternal health.

* * *

Arthur K. Northrop, M.D., Detroit, was honored at a Golden Jubilee Dinner, sponsored by the staff of Mount Carmel Mercy Hospital, Detroit, on March 20. Several hundred physicians were present to fete Dr. Northrop on the completion of fifty years of practice in Detroit.

* * *

To help celebrate the 30th Anniversary of the founding of the Hack Shoe Company, Detroit, Lt. Colonel Morton Hack, Vice-President of the Company and son

(Continued on Page 536)

OWEN CLINICAL LABORATORY

THE laboratory is located in rooms 1551-1559 David Whitney Building.

AND is open daily from 9:00 A. M. to 5:30 P. M., except Sundays.

PATIENTS can be sent to the laboratory at any time during these hours.

WHERE patients cannot come to the laboratory a member of the staff will call and make what examinations are desired at an additional fee according to the distance.

MESSENGERS will gladly be sent to your office or to a patient's home to pick up specimens without charge.

SEROLOGICAL tests run daily except Sunday and the reports ready by 11:00 A. M. the following day.

ALL other tests reported as promptly as the nature of the specimen permits.

NO examinations made directly for a patient. All reports must go through the attending physician.

THE staff confines its entire attention to diagnostic work.

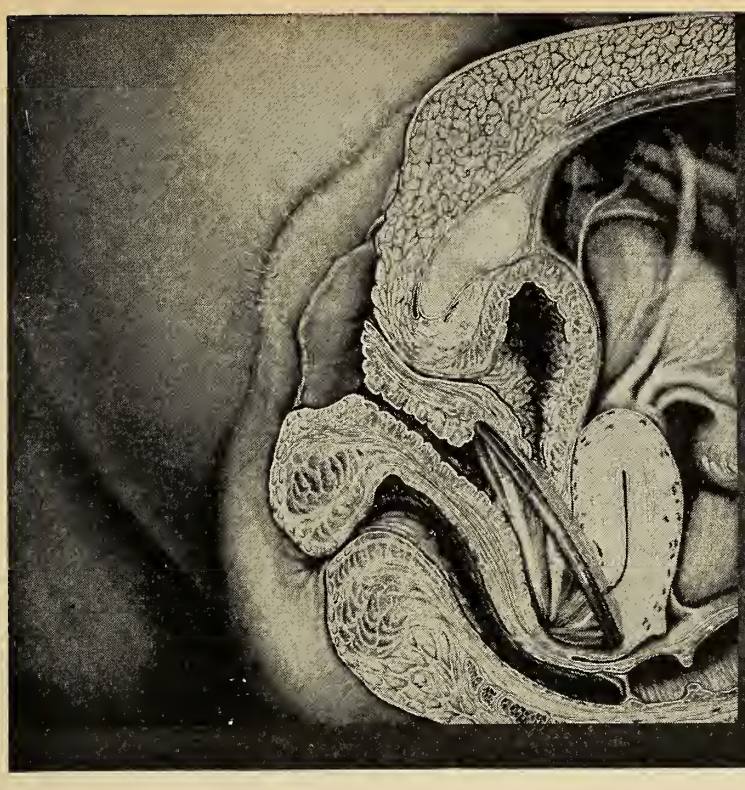
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In view of the preponderant clinical evidence in its favor, we suggest that physicians will afford their patients a high degree of protection by prescribing the diaphragm and jelly technique.

You assure quality when you specify a product bearing the "RAMSES"* trademark.

1. Dickinson, R. L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
2. Eastman, N. J., and Scott, A. B.: Human Fertility 9:33 (June) 1944.
3. Warner, M. P.: J. A. M. A. 115:279 (July 27) 1940.

gynecological division

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(Continued from Page 534)

of the founder, returned to active duty with the organization after nearly five years' service in the armed forces. One of Colonel Hack's recent assignments was the rehabilitation of 80,000 American prisoners of war liberated from German prison camps.

* * *

"The Quarterly Review of Psychiatry and Neurology" and the "Quarterly Review of Urology" have just made their appearance. These new medical journals are published by the Washington Institute of Medicine, 1720 M St., N. W., Washington 6, D. C.

* * *

James L. Wilson, M.D., Ann Arbor, Cyrus C. Sturgis, M.D., Ann Arbor, and Wm. H. Gordon, M.D., Detroit were guest speakers at the 72nd Annual Meeting of the Northern Tri State Medical Association held in South Bend on April 9.

* * *

The Interstate Postgraduate Medical Assembly of North America will be held in the Cleveland Auditorium, Cleveland, Ohio, October 15-18 inclusive, 1946. For copy of program write Arthur G. Sullivan, M.D., Managing Director, 16 N. Carrol, Madison, Wisconsin.

* * *

The Second Annual Conference of Presidents and Other Officers of State Medical Associations, under the presidency of A. S. Brunk, M.D., Detroit, will be held in San Francisco on Sunday, June 30, 1946. All officers of states and county medical societies, as well as members thereof, are cordially invited to attend the San Francisco conference to enjoy a timely and stimulating program.

* * *

On to San Francisco. Physicians planning to go by rail to the West Coast for the AMA meeting, July 1 to 5, 1946, are urged to arrange their itineraries at an early date and to contact their local railroad agents. Pullman reservations are available but may be difficult to obtain.

* * *

Sponsors of the Norton Medical Award of $3,500, offered to encourage the writing of books on medicine and the medical profession for the layman, are inviting manuscripts for the 1947 winning book. For particulars write W. W. Norton and Co., 79 Fifth Ave., New York 11.

* * *

The American Physicians Art Association will feature an exhibit in San Francisco in 1946, as well as in Atlantic City on the occasion of the Centennial Session of the American Medical Association, in 1947. For entry blanks, write Francis H. Rodewill, M.D., Flood Bldg., San Francisco, or the sponsor, Meade Johnson and Co., Evansville 21, Indiana.

* * *

"Doctors at Home" is the title of the 11th series of dramatized radio stories sponsored by the American Medi-

(Continued on Page 538)

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(Continued from Page 536)

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This slogan was developed by the Washington State Medical Association and appears in its leaflets prepared by the Committee on Maternal and Child Welfare of which H. H. Skinner, M.D., of Yakima is Chairman.

* * *

New York State turned down compulsory health insurance, as the result of action of Governor Dewey's Commission on Medical Care, after a study of 15 months. The Commission declared any plan financed on compulsory basis would cost "at least $400,000,000 a year in New York. The Commission is of the opinion that this sum represents too great an expenditure to be imposed on the people of the State, either directly or indirectly through governmental authority."

* * *

The Annual Bulletin of Mount Carmel Mercy Hospital, Detroit contains eight scientific articles: "Acute Hemorrhagic Pancreatitis" by L. J. Gariepy, M.D., Detroit; "Appendiceal Corrolith Simulating Ureteral Calculus" by W. G. Coleman, M.D., Detroit; "Clinical and Roentgenologic Diagnosis of Diaphragmatic Hernia" by L. J. Gariepy, M.D., and J. H. Dempster, M.D., Detroit; "Non-Splinting Treatment of Elbow Joint Injuries" by Thomas A. Boutrous, M.D., Alexander Blain, M.D., and W. A. Chipman, M.D., Detroit; "Spontaneous Hypo-Glycemia" by Henry L. Smith, M.D., and J. Earl Estes, M.D., Detroit; "Torsion of the Gall Bladder Associated with Acute Appendicitis" by C. W. Husband, M.D., and N. L. Schmitt, M.D., of Detroit; "Tubal Pregnancy" by John M. Sisson, M.D., Detroit, and "The Undescended Testis" by Louis J. Bailey, M.D., Detroit.

* * *

Lyman Clair Zimmerman, forty-seven, who formerly operated a so-called "health club" in Jackson, has been sentenced to Southern Michigan prison to serve a term of from two to three years for desertion and nonsupport of his wife and four children. Sentence was imposed Tuesday at Monroe by Circuit Judge Clayton W. Golden.

Zimmerman's activities here were brought to an abrupt end following an investigation by the state health department and police. He ran offices in the Carter Bldg. He was arrested on a charge of practicing medicine without a license and after pleading guilty, was placed on probation.

Later he left Jackson for Monroe. July 15, 1945, he left "suicide" notes on the shores of Lake Erie. His arrest in South Bend occurred when residents of Monroe recognized his voice on a broadcast, police stated. He had dyed his hair and mustache.—*Jackson Citizen-Patriot,* February 20, 1946.

(Continued on Page 540)

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(Continued from Page 538)

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Aminophyllin 3 gr. with Phenobarbital ½ gr. Enteric Coated.....(Searle)
Aminopbyllin 2½ gr. with Potassium Iodide 2 gr. and Phenobarbital ¼ gr.....(Searle)
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Calcidrine Syrup with Codeine.....(Abbott)
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Ephedrine and 'Amytal' (tablets).....(Lilly)
Ephedrine and Nembutal Capsules.....(Abbott)
Ephedrine and Neonal Tablets.....(Abbott)
'Enseals' Ephedrine and 'Seconal Sodium'.....(Lilly)
Pulvules Ephedrine and 'Seconal Sodium'.....(Lilly)
Pulvules Ephedrine and 'Amytal'.....(Lilly)
Tablet Ephedrine and 'Amytal'.....(Lilly)
Pulvules Epragen.....(Lilly)
Ephedrine and Cyclogal Capsules.....(Upjohn)
Ephedrate, Compressed Tablets.....(Upjohn)
Ephetal Tablets.....(Abbott)
Evicyl Tablets.....(Winthrop)
Franol Tablets.....(Winthrop)
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Glucophylline and Nembutal No. 2 Tablets.....(Abbott)
Iocapral Tablets.....(Winthrop)
Kres-Lumin Syrup.....(Winthrop)
Lumalgin Tablets.....(Winthrop)
Lumodrin Tablets.....(Winthrop)
Manartal Tablets.....(Abbott)
Mannitol Hexanitrate with Phenobarbital (Tablets).....(Squibb)
Tablets of Mannitol Hexanitrate.....(Lederle)
Nembu-Fedrine Capsules.....(Abbott)
Nembutal and Belladonna Capsules.....(Abbott)
Paxonin Tablets.....(Lederle)
Pavatrine 2 gr. with Phenobarbital ¼ gr.....(Searle)
Phenobarbital and Belladonna Tablets.....(Upjohn)
Phenobarbital and Belladonna, No. 2 Tablets.....(Upjohn)
Tablets Phenobarbital and Belladonna.....(Lilly)
'Tabloid' Phenobarbital and Bromides Eff.....(Burroughs & Welcome)
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Theominal Tablets.....(Winthrop)
Pulvules 'Theamin' and 'Amytal'.....(Lilly)
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(Continued on Page 546)

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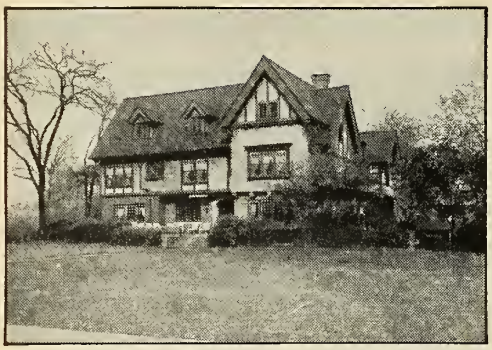
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Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

THE CARE OF THE AGED (GERIATRICS). By Malford W. Thewlis, M.D., Attending Specialist, General Medicine, United States Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R. I.; Director, Thewlis Clinic; Special Consultant, Rhode Island Department of Public Health. Fifth Edition, Thoroughly Revised. St. Louis: The C. V. Mosby Company. 1946. Price $8.00.

This book has been extensively rewritten in the light of newer knowledge and conditions. One paragraph is worth many times the cost of the book to any practicing physician. The Prevention of Coronary insufficiency in physicians over fifty years of age. The advice is good, and we all should take it. See page 240. Without that special value to the practicing physician this book is so new and so up to date you cannot afford to neglect it.

* * *

THE PHYSIOLOGICAL BASIS OF MEDICAL PRACTICE, A University of Toronto Text in Applied Physiology. By Charles Herbert Best, C.B.E., M.A., M.D., D.Sc. (Lond.), F.R.S., F.R.C.P. (Canada), Professor and Head of the Department of Physiology, Director of the Banting-Best Department of Medical Research, University of Toronto; and Norman Burke Taylor, V.D., M.D., F.R.S. (Canada), F.R.C.S. (Edin.), F.R.C.P. (Canada), M.R.C.S. (Eng.), L.R.C.P. (Lond.); Professor of Physiology, University of Toronto. Fourth Edition. Baltimore: The Williams & Wilkins Company. 1945. Price $10.00.

Four editions and fourteen printings speak for the value of this work. It gives the basic science underlying

(Continued on Page 544)

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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

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(Continued from Page 542)

the study of all forms of medical research. Every field of investigation is well investigated, and the material given is far from cursory. There are sections on the nervous system, the ductless glands, the special senses, sight, hearing, et cetera. The references are invaluable. We are very favorably impressed with the book and have been pleased with the detail given.

* * *

HYPNOANALYSIS. By Lewis R. Wolberg, M.D., Lecturer in Psychology, New York Medical College. Foreword by A. Kardiner, M.D., Assistant Clinical Professor of Psychiatry, Columbia University. New York: Grune & Stratton, 1945. Price $4.00.

The first hundred and thirty pages of this book are the experiences of the author in hypnoanalysis of a certain patient, Johan R., who had been diagnosed heborphrenic schizophrenia. At first there was no response, but gradually the patient responded, and finally was discharged entirely rehabilitated. He reported back for checkup, and occasional hypnoanalysis for several years. Part Two is devoted to the theory and practice of hypnoanalysis, with methods of study by hypnosis, the recall of buried memories and transference resistance and interpretation of hypnotic gleanings. The book must be of benefit to all those interested in the treatment of psychiatric cases. It should be especially helpful with our many thousands of mental imbalances following the war.

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The Third Councilor District meeting was held at the Hart Hotel, Battle Creek on Tuesday, February 5. Councilor Wilfrid Haughey, M.D., acted as Toastmaster and introduced the speakers: R. S. Morrish, M.D., Flint, President, spoke on "Medical Education, and the Uniform Fee Schedule for Governmental Agencies," L. Fernald Foster, M.D., Bay City, Secretary, spoke on "Medical Public Relations," J. C. Ketchum, Detroit, Executive Vice President of Michigan Medical Service, spoke on "A Veterans Administration Program in Michigan," and Executive Secretary Wm. J. Burns, Lansing, spoke on "The Fourteen 'Firsts' of Michigan."

Eighty-three were present.

Dr. Haughey was honored by being made an honorary member for life of the Calhoun County Medical Society by unanimous action of his confreres.

* * *

The Fourteenth Councilor District meeting, under the leadership of Councilor Dean W. Myers, M.D., Ann Arbor, was held in the Michigan League of Ann Arbor on Thursday, January 10, 1946. Seventy-five physicians from Washtenaw, Lenawee, Monroe, and Livingston Counties were present at the meeting to hear President R. S. Morrish, M.D., Flint, speak on "Postgraduate Medical Education in Michigan," in which he advocated the creation of a course in medical economics in the two Michigan medical schools, with lecturers chosen from among practitioners of medicine.

John W. Castellucci, Detroit, Field Supervisor of Michigan Medical Service, outlined the "Veterans Administration Program for Home-Office Medical Care of Veterans in Michigan."

Secretary L. Fernald Foster, M.D., Bay City, spoke on the "Uniform Fee Schedule for Governmental Agencies and the Need for More Public Relations by the Medical Profession."

Executive Secretary Wm. J. Burns, Lansing, outlined the "Fourteen 'Firsts' of the Michigan Medical Profession."

A spirited discussion ensued, the round table being conducted by J. J. Woods, M.D., Ypsilanti, President of the Washtenaw County Medical Society.

* * *

The First-Sixteenth Councilor District meeting was held in Detroit on Monday, February 4. C. E. Umphrey, M.D., and E. R. Witwer, M.D., Councilors of the host Districts, presided at the dinner and the subsequent meeting. At the dinner the following MSMS officials were introduced: Councilors P. A. Riley, M.D., of Jackson; F. H. Drummond, M.D., of Kawkawlin; Wilfrid Haughey, M.D., of Battle Creek; Speaker P. L. Ledwidge, M.D., Detroit; Vice-Speaker J. S. DeTar, M.D., of Milan, and Executive Secretary Wm. J. Burns, Lansing. At the meeting, the following subjects and speakers were presented:

(1) "Medical Economics".....
MSMS President R. S. Morrish, M.D., Flint

(2) "Medical Public Relations".....
MSMS Secretary L. Fernald Foster, M.D., Bay City

(3) "Michigan's Plan for Home-Office Medical Care of Veterans".....
WCMS President S. W. Insley, M.D., Detroit

(4) "Conference of Presidents and Other Officers of State Medical Societies".....
A. S. Brunk, M.D., Detroit, President of Conference

(5) "The Fourteen 'Firsts' of Michigan".....
MSMS Council Chairman E. F. Sladek, M.D., Traverse City

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*Key, J. A. and Conwell, H. E., p. 1237, The Management of Fractures, Dislocations and Sprains," Mosby, St. Louis, 3rd Ed., 1942.

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VOLUME 45 MAY, 1946 NUMBER 5

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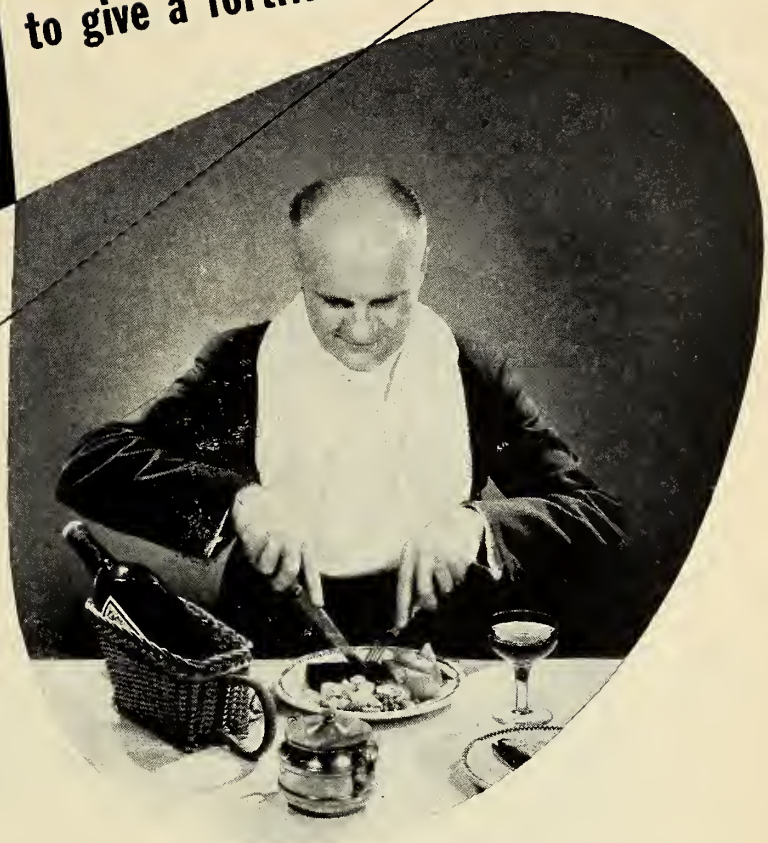
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The Light that Never Fails!

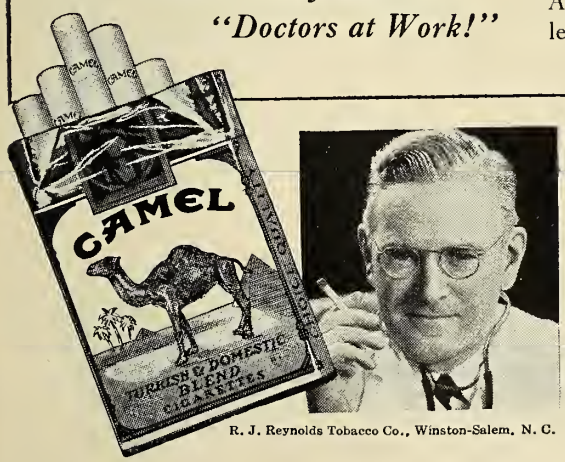


"Emergency Case!"

While the city sleeps, lights blaze in a hospital ward—they mean "Doctors at Work!"

He isn't interested in making speeches and taking bows on the magnificent job he does. He's just interested in doing that job with all the skill and selfless devotion he possesses.

His battle knows no lulls. But he asks no quarter. All this he knew—and accepted—when those proud letters "M.D." were first affixed to his name.



According to a recent independent nationwide survey:

MORE DOCTORS SMOKE CAMELS

than any other cigarette

R. J. Reynolds Tobacco Co., Winston-Salem, N. C.

You and Your Business

ROSTER OF MEMBERS

The Directory Number of THE JOURNAL (July, 1946, issue) will contain the names of all members in good standing, as well as military members, of the Michigan State Medical Society.

All military members' dues are remitted for the year 1946.

Be sure your name is in the Directory Number. If you have not already done so, contact the Secretary of your County or District Medical Society today.

* * *

MSMS ANNUAL SESSION

The 81st Annual Session of your State Society will be held at the Book-Cadillac Hotel, Detroit, Wednesday-Thursday-Friday, September 25-26-27, 1946. A stellar program is being arranged. It will be a great *Victory Meeting!*

The shortage of hotel accommodations in Detroit requires the appointment of an MSMS Housing Committee to aid members to secure bedroom reservations for the 1946 Session. Members are invited to write E. C. Texter, M.D., Chairman, MSMS Housing Committee, 1005 Stroh Bldg., Detroit, Michigan, for accommodations for the MSMS Session.

* * *

UNIFORM FEE SCHEDULE FOR GOVERNMENTAL AGENCIES

The Michigan Social Welfare Commission, on March 21, approved the principle of a uniform fee schedule covering medical fees, but recommended to county social welfare boards that they negotiate agreements with county or district medical societies consistent with the going rates in the community and that in no instance should such rates exceed the fees which are charged to private patients in the community. Under the welfare law, the State Social Welfare Commission has no authority to establish maximum or minimum prices for medical care issued by county social welfare boards but can only match expenditures on the basis of disbursements of the social welfare boards. However, its approval of the Uniform Fee Schedule in principle is an important precedent, especially to county social welfare departments.

The State Welfare Commission further approved the following: where the fees as set forth in the Uniform Fee Schedule for Government Agencies apply to cases where federal funds are involved (such as rehabilitation for the blind, civilian war assistance, enemy alien assistance, and incapacitation cases on the aid to dependent children program), a certification will be required from the attending physician on each voucher submitted for payment to the effect that the fees charged are not in excess of the lowest fees charged any other agency for the same service.

State Rehabilitation already had adopted the same rule covering its clients.

The Uniform Fee Schedule for Governmental Agencies has been approved in principle by three state agencies (Michigan Social Welfare Commission, Michigan State Rehabilitation, and Michigan Crippled Children Commission), and by the Veterans Administration on the federal level.

* * *

MEDICAL CARE OF MICHIGAN VETERANS

Have you signed and returned to MSMS the post card signifying your desire to be appointed a fee-designated physician under the Veterans Administration program for "home town medical care" in Michigan for *VETERANS WITH SERVICE-CONNECTED DISABILITY?* Every doctor of medicine is entitled to serve under this program, designed to preserve the physician-patient relationship. Veterans are being told to seek medical care from their own doctors. Only those physicians who return the postal card to MSMS will be entitled to compensation for their medical services to veterans under this plan. Daily, hundreds of cases are receiving medical care on this private basis, so mail your card (or the following coupon) at once if you have not already done so.

PARTICIPATION BLANK

Please file my acceptance of appointment as a fee-designated physician under the plan for veterans' care outlined in your Secretary's Letter No. 98 dated December 26, 1945.

(signed) ....., M.D.

Street.....

City.....

.....
(Date)

(Continued on Page 564)

ANOTHER *First* from TESTAGAR

Special AMINOPHYLLIN SUPPOSITORIES

for relief of Asthma and certain coronary conditions where Aminophyllin is indicated.

Assure faster—more sustained relief—free from potential gastric irritation.

In addition to the obvious advantages of administering Aminophyllin rectally, these Special Aminophyllin Suppositories (Testagar) alleviate any possible burning or smarting because each suppository contains ½ grain of Benzocain . . . combined with 7½ grains of Aminophyllin in a cocoa butter base.

ADULT DOSE: One suppository for relief and one as needed for maintenance therapy.

Write for literature and samples.

Testagar & Co., Inc.
Detroit 26, Michigan

(Continued from Page 562)

SOME OF MSMS PUBLIC RELATIONS ACTIVITIES

A newspaper advertising program has been approved by MSMS. It calls for 12 different ads in a series being prepared by the MSMS P. R. Counsel, H. W. Brenneman. These ads in newspapers throughout the State will be inserted by county medical societies. The State Society will pay for the first insertion. A good percentage of county societies are utilizing newspaper advertising, with excellent results in public relations.

"Little Joe Genius" is a new character being featured in a series of pamphlets published by MSMS for distribution by physicians to the laity.

The medical profession today is under the most critical microscope of public attention, and must be seen and heard in the most favorable light. Public Relations begin at home.

If a Speakers Bureau has been organized in your county or district medical society, have you proffered your services to speak to lay groups such as veteran, fraternal, service, and community organizations? Or—if you prefer not to speak—have you contacted one or more of these organizations in an endeavor to arrange a speaking engagement for a representative of the State or County Medical Society? Medicine has a message which in many areas is being hidden under a bushel. Work to the end that an active and alert Speakers Bureau exists in your county. Speaker's kits are available from MSMS, 2020 Olds Tower, Lansing 8, Michigan.

* * *

HEARINGS ON S. 1606

The following witnesses appeared before the Committee during the first two weeks of the hearing which began April 2: Senator Robert F. Wagner, New York; Senator Claude Pepper, Florida; Congressman John D. Dingell, Michigan; Dr. J. W. Mountin, representing the Surgeon General of the United States Public Health Service; Watson B. Miller, Federal Administrator of the Federal Security Agency; Arthur J. Altmeyer, Chairman of the Social Security Board; Leo J. Linder, Chairman of the National Committee on Social Legislation of the National Lawyers Guild, and William Logan Martin, representing the American Bar Association; Fiorella H. LaGuardia, Director of UNRRA; Helen Hall, representing the National Federation of Settlements; Joseph Fichter, representing the Joint Commission on Health of the National Planning Association; The Rt. Rev. John O'Grady, representing the National Catholic Rural Life Conference; and The Rev. Francis W. McPeek, representing the National Council for Social Action of the Congregational Christian Churches.

Each of these witnesses was interrogated at length by members of the Committee, and each, in turn, filed a lengthy statement expressing the point of view of his group or agency. Summaries of the testimony and the statements are appearing in current issues of the *Journal of the American Medical Association.*

On the first day of the hearings, immediately after Chairman Murray had opened the session, Senator Robert Taft, Ohio, requested permission of the Chairman to make a statement. Premission was refused, and there followed a very heated discussion between Senators Taft and Murray.

Notable incidents which occurred during the hearings were the intelligent and thought-provoking questions and statements by Senators Ellender, Louisiana; Donnell, Missouri, and Aiken, Vermont.

Chairman Murray has retreated from his original decision to hold medical representatives to national organizations. Some representatives of a few state medical societies will be invited to act as witnesses at the extension of the hearings on the Wagner-Murray-Dingell Bill. The Michigan State Medical Society has continued its urgent requests to be permitted to send representatives from this state to the hearing in Washington, D. C.

* * *

ENGLAND'S STATE MEDICINE PROPOSAL

A Bill for nationalizing the medical profession and all its branches and making available free medical, hospital and nursing service for everybody in England and Wales was presented to Parliament on March 21 by Aneurin Bevan, Minister of Health, along with an explanatory White Paper. The program would go into operation early in 1948 and would cost an estimated $608,000,000 a year or about $15.00 a person. A similar Bill to cover Scotland is to be introduced later. Everything from major operations to household medicine would be supplied free without distinction of age, sex and income of the patient. Salaries and other expenses involved would be met by the Government but patients would be allowed to buy extra comforts or pay independent doctors if they wish to do so. *The B.M.A. was consulted during the*

(Continued on Page 578)



Bile salts are the "only satisfactory manner"[1] of correcting the bile stasis commonly responsible for constipation, epigastric distress, vague abdominal pain, anorexia, and listlessness.

Torocol* acts promptly to increase the flow of free bile, reestablish biliary drainage, and render fat particles easier to digest. Improved peristalsis is further aided by mild evacuants. As bowel regularity is initiated, dyspepsia symptoms are relieved, food tolerance increased, and a sense of well being regained.

Small, smooth, easy-to-take Torocol tablets provide bile salts, extract cascara sagrada, phenolphthalein, oleoresin capsicum, and oil of peppermint.

SAMPLES and literature to the profession.

Torocol

For The Stagnant Gallbladder
Gentle Laxative and Choleretic

THE PAUL PLESSNER CO.
Detroit 2, Michigan

[1]Am. J. Dig. Dis. 10:141, 1943.
*T. M. Reg. U.S. Pat. Off.

Michigan Health Council

The Michigan Health Council has brought a united front to the support of such measures as the Hill-Burton Bill (S-191) for hospital surveys and construction, a hospital licensing bill for Michigan, and such other legislation as would benefit the health of the people. At the same time the Health Council has enabled strong opposition to those proposals which are detrimental to the people or unsound from professional viewpoints.

In the field of public relations the Michigan Health Council retained Professor Floyd E. Armstrong, noted economist and educator, as a spokesman on medical economics. Professor Armstrong has carried the message of the progress of the American system of medical care to thousands of persons.

The Health Council has also compiled a library on health economics and maintains a file of current newspaper clippings, pamphlets and other material in the field. This material is available upon request to all members of the health professions and other interested persons.

News releases, articles for professional journals, pamphlets and booklets have been published and distributed by the Health Council as a regular part of its public relations activities.

With the original conception of the functions and purposes of the Health Council now an integrated part of its activities, the way now has been cleared for further development.

It has long been recognized by the Michigan Health Council that its facilities are not sufficient to reach all the people of this state by direct methods. To carry its program to the local level, the Michigan Health Council now is proposing the establishment of local community health councils in every locality where a representative group of health leaders can be formed.

The function of the Michigan Health Council in this project will be to give counsel and guidance and to act as co-ordinator and clearing agency for the local groups. The Michigan Health Council will also serve as a source of educational and promotional material and will interpret national developments for dissemination at the local level.

Because of the rapid developments in the field of health care both nationally and locally it has become apparent that the need for co-ordinated effort on the part of *all* health professions is greater now than ever before. The Michigan Health Council provides an instrument for the betterment of inter-professional as well as public relations.

Until recently the Health Council has consisted of representatives from Michigan State Medical Society, Michigan Hospital Association, Michigan Medical Service and Michigan Hospital Service. The Health Council now has invited the Michigan State Dental Society, Michigan Nurses Association, Michigan Public Health Association, Michigan Health Officers Association and other health groups to join in developing a united front in the eternal quest for better health for the American people.

While this effort has been concentrated largely in Michigan, the Council also has shared actively in endeavors to forward similar programs nationally.

As those who have followed the progress of the Health Council know, it already has accomplished a great deal toward better co-ordination of health activities.

The proposal for a National Health Congress recently carried before the House of Delegates of the American Medical Association drew part of its inspiration from experience with the Michigan Health Council. The idea originated with the Conference of State Society Presidents and Other Officers, which itself was an outgrowth of the meetings called in Detroit by A. S. Brunk, M.D., at the time he was President of the Michigan State Medical Society. The American Medical Association has now authorized its council on Medical Service and Public Relations to take the initiative in organizing a National Health Council. Meanwhile, the Michigan Health Council is preparing to co-operate in every way possible with the proposed National Congress.

Mother Presented With Fifth Set of Twins

Grand Rapids—St. Mary's Hospital authorities said that Mrs. Gerrit Kooiengas, 38, and her fifth set of twins born there are in "fine condition." With the twins' arrival Mrs. Kooiengas, wife of a Byron Center celery grower, became the mother of nineteen children. Her oldest child, Andrew, nineteen, is in the Army.



gentle reminder

For the patient with functional constipation, 'AGAROL'* Emulsion serves as a gentle reminder rather than a violent summons. This emulsion of mineral oil with phenolphthalein and an agar-gel permits effective, yet gentle relief through:

1. Replacement of lubricating factors with highly emulsified mineral oil and a colloidal gel similar to mucin in its lubricating properties.
2. Replacement of moisture through its distinctive hydrophilic action.
3. Minimal threshold stimulation of peristaltic activity.

These actions are integrated to promote the formation of a consolidated, lubricated and easily passed ecal mass. Simultaneously, they encourage physiologic restoration of the patient's own evacuatory mechanisms.

For additional pharmaceutical details consult your pharmacist—for more extensive medical data write Medical Division of William R. Warner & Co.

William R. WARNER and Co. Inc 113 WEST 18TH STREET, NEW YORK 11, N. Y.

'agarol'

Emulsion of mineral oil with phenolphthalein and an agar-gel. Dispensed in bottles of 6, 10 and 16 fluidounces.

*Trademark Reg. U. S. Pat. Off.

Say you saw it in the Journal of the Michigan State Medical Society

Study of Child Health Services

Announcement by Frank Van Schoick, M.D., Jackson, Mich.

The American Academy of Pediatrics at its annual meeting in St. Louis in November, 1944, approved a plan of its "Committee on Child Health in the Postwar Period" to make a survey of the needs of the children of the United States and the facilities available to meet these needs. The project as conceived and subsequently carried out in the "Pilot State," North Carolina, is unique in that it is a study by doctors of the situation in their own field of endeavor; of the medical care received by and available to children, of existing facilities for medical care, and the education and training of physicians giving that care.

After the groundwork of the survey was worked out in North Carolina, it became quite evident that the major premise of the Academy was correct—that the doctors were the logical ones to initiate and conduct an investigation in evaluating services and the needs and facilities relative to the care of children. This is a survey by doctors who are studying their own problems of supply and demand both qualitatively and quantitatively. It must be emphasized that this study is in no way connected with any of the many plans which have been proposed for medical care. As a matter of fact, this is an honest and sincere effort to collect factual data by doctors, that they may better answer the many problems involved in rendering medical aid to the children of America.

We have certain ideas as to the adequacy of care in America. We believe the over-all picture is the best in the world, realizing just as surely the need for improvement, particularly in certain areas. Others have just as strong ideas and concepts, mostly based on the quality and quantity of services in the less fortunate areas. Between these widely divergent ideologies must rest the true course for us in America. This is our challenge, self-imposed, to complete this survey in order better to understand our own problems and to offer the correct solution to the exigencies of supply and demand.

Michigan was chosen for the original or pilot state, but for reasons beyond the control of the committee, mainly geographic, North Carolina was the first state to complete the project. In Michigan we have a cross section of the United States. We have extremes in densities of population, we have extremes in social and economic strata, we have the most highly industrialized area in the world. We have highly developed mining, fishing, farming, lumber and recreation industries, to mention only a few.

From the medico-social standpoint, we have the most highly developed plan for distribution of medical care. We have been in the habit of studying our own problems and coming up with an answer. We also have the habit of being *first* in the application of our answer to the problem of supply and demand. We must not let this habit fail in the present project.

Co-operating with the Academy in Michigan is the Michigan State Medical Society and our good friends and co-workers, the Society for Crippled Children and Disabled Adults, Inc. This co-operation is financial as well as physical, and therein we register another Michigan first.

Within the next few weeks each physician in the state will receive a short questionnaire. It is of utmost importance that this be completed as soon as possible and *returned*. By so doing the practicing physician has the opportunity to determine the needs in Michigan and thereby determine the best methods to meet these needs.

Let's have another Michigan First—The Best!

ARMY MEDICAL LIBRARY

The Army Medical Library began in 1836, and was a small collection of books and pamphlets in the office of the Surgeon General. In 1869 it boasted 5,000 volumes, but by 1879 there were 50,000 books, and a building was constructed for $250,000, which is still occupied by the library. This building was completed in 1877.

The library has constantly grown until it is the greatest in the world. In 1941 plans for a new building on Capitol Hill were drawn, but war made other demands. During the war the library has provided a service beyond what could be expected. Through the years its collections have grown to over a million items, over 500,000 being bound volumes. It has 513 incunabula (books printed before 1500 A.D.). It is hoped that a suitable new building will soon be in the group on Capitol Hill.

CLINICALLY EFFECTIVE

It is now known that Ertron is unique—differing clinically and chemically from all other drugs used as antiarthritic medication.

An extensive bibliography, based on ten years of clinical research, affords ample evidence regarding the effectiveness of Ertron in arthritis.

CHEMICALLY UNIQUE

It can now be stated, on the basis of recent laboratory research, that Ertron is chemically different.

Simply stated, Ertron is electrically activated vaporized ergosterol prepared by the Whittier Process. Each capsule contains 5 mg. of activation-products having a potency of not less than 50,000 U.S.P. Units of vitamin D.

Ertron contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure chemical form further establish the chemical as well as the therapeutic uniqueness of Ertron.

ERTRONIZATION THERAPY

Physician control of the arthritic patient is essential for optimum effect. To Ertronize, employ Ertron in adequate daily dosage over a sufficiently long period to produce beneficial results. If signs of overdosage appear, discontinue medication for about ten days—then continue with three capsules per day gradually building up to the patient's level of tolerance.

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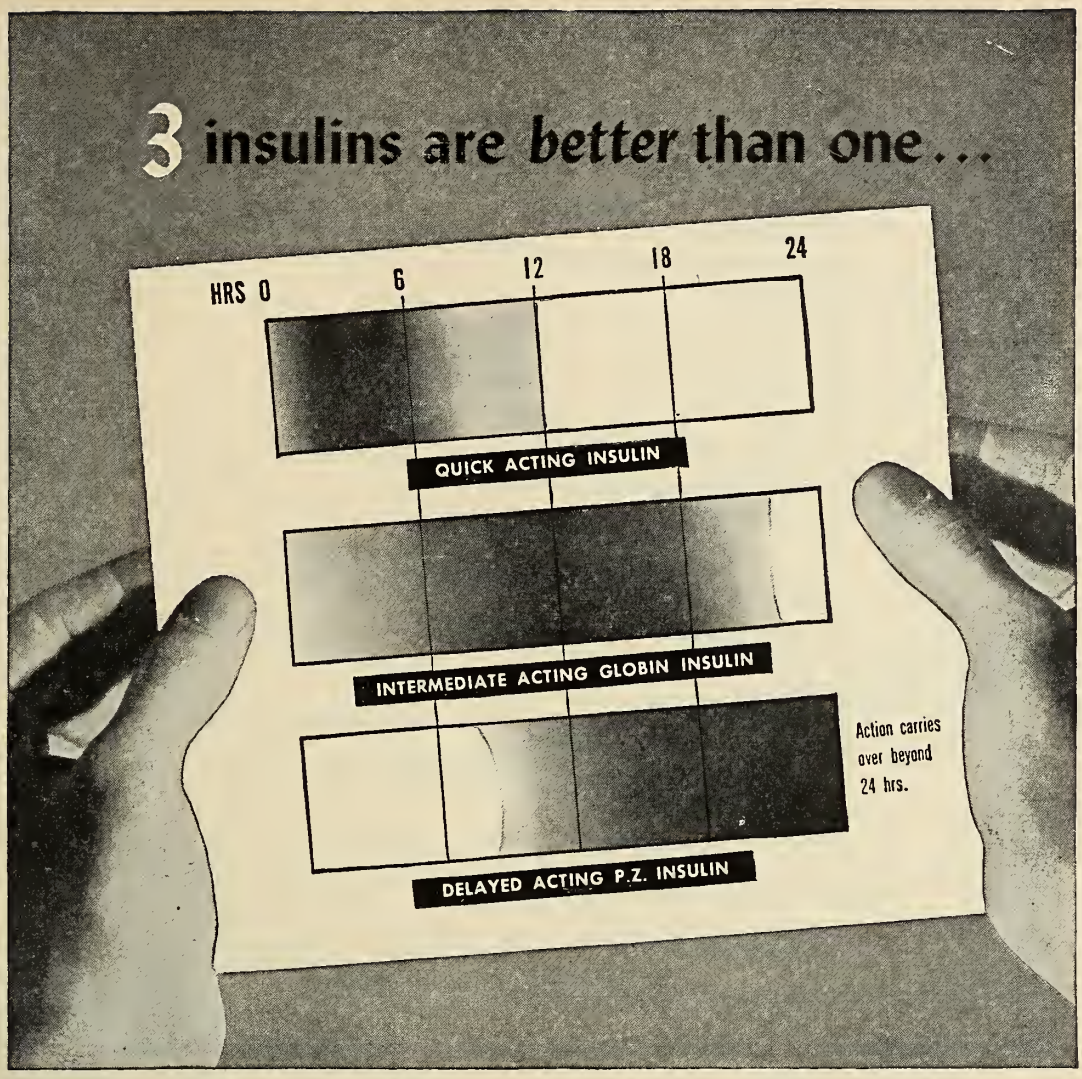
Criticizing the Critics of the Wagner-Murray-Dingell Bill

The latest contribution of the Washington braintrusters who are utilizing every effort, both day and night, to socialize the United States by inserting the entering wedge of state-political medicine, is the following questionnaire which has been titled the "Consumer's Guide for Criticizing the Critics of the Wagner-Murray-Dingell Bill, S.1606."

1. Are people at present getting adequate medical care?
2. What does the bill do for you if adopted?
3. What will it cost you?
4. Can doctors working on a fee basis take care of all people needing medical care?
5. How much time is wasted by doctors waiting for patients?
6. How much time is taken up by doctors trying to keep books?
7. Why don't doctors go to the places where they are needed instead of going to the cities where the hospitals are?
8. Is State control bad and medical association good for sick folks?
9. Is the bill a bid for "Socialism" or is it just a "red herring" to prejudice the public against the bill?
10. Does Russia have the same kind of system as embodied in this bill?
11. If they have was it necessarily copied from them?
12. Is Socialized Medicine in Great Britain unsatisfactory to the British people or is it only the medical societies which do not like it?
13. Is working for the State an undesirable, an unpatriotic occupation? Are public employes pariahs of society who should be shunned by all decent citizens?
14. Is the fact that American boys of military age could not pass the physical examination by an extremely high percentage of no importance to you or me?
15. Is the private enterprise system so sacred that the health of children should be jeopardized to protect it?
16. Is it so terrible for Government officials to be given the responsibility of handling billions of dollars?
17. Does the prospect of a bureaucratic machine scare young men of the medical profession or are they kept out by restrictions by the American Medical Association politicians who demand scarcity of doctors in order to keep up the doctors' income?
18. Are all doctors opposed to this bill?
19. Will it destroy present hospitals and hospital plans?
20. How much would be saved in wealth and lives if we had real preventive medicine in place of the old worn-out cure-'em-after-they-get-sick anarchy?
21. Are the provisions of this bill any more socialistic than any State Board of Health?
22. Why did the *AMA Journal* call President Hoover's Committee on costs of medical care in 1932 "communistic"?
23. Why did the California Medical Association decide to suppress the Dodd report on Medical Needs in California?
24. Co-operative hospitals in various parts of the country are not State-controlled. Why does the Medical Association oppose them?
25. What is the AMA doing about the States in which the number of medical graduates is getting smaller every year?
26. Under the bill would a patient be compelled to consult a doctor he would not want?
27. Do people who patronize free clinics have free choice of doctors?
28. Would the bill free the poor from the charity system?
29. Would the bill help the young doctor to get started on full employment of his knowledge and skill?
30. Would the bill's National Advisory Medical Policy Council be composed of politicians only with no doctors on it?
31. Does the U. S. Surgeon General have dictatorial authority under the bill and with no check on his program?
32. Would Government bureaucrats administer the law?
33. What is the National Physicians' Committee?
34. Where does the money come from for the campaign against the bill?
35. Why are big drug companies helping the AMA in its campaign?
36. Why are the insurance companies against the bill?
37. If Michigan draft quotas during the War had to be exceeded because of the high percentage of rejections in certain Southern States should we think that is a serious matter or should we shrug it off as of less consequence than the fact that Michigan would be paying out more than would be received from the Federal Government in any program of Federal Aid?

All of these *leading questions,* aimed to further befuddle the already confused public on this question, can easily be answered by anyone who has made a cursory study of medical economics. For example, the answer to question 23, like all the other answers, is simple. The California Medical Association published the Dodd report as a bound volume of 174 pages; 6,400 copies were printed and distributed at a cost of $5,103.50—on top of more than $41,000 expended by CMA to make the Dodd survey. Is this the suppression of a report?

Innuendo and misinformation may work for a while, but they are not good or honest weapons to win a great battle.



THE PHYSICIAN treating diabetes today has the choice of three types of insulin. One is rapid-acting but short-lived. Another is slow-to-start but prolonged. Intermediate between them is the new 'Wellcome' Globin Insulin with Zinc which starts fairly promptly and continues *for sixteen hours or more.* Action is maximal during the times of major carbohydrate intake but diminished toward bedtime so that the likelihood of nocturnal reactions is decreased. Today, the physician is wise to consider all *three* insulins.

'Wellcome' Globin Insulin with Zinc is a clear solution, comparable to regular insulin in its freedom from allergenic properties.

Accepted by the Council on Pharmacy and Chemistry, American Medical Association. Developed in the Wellcome Research Laboratories, Tuckahoe, New York. U.S. Patent No. 2,161,198. Available in vials of 10 cc., *80 units in 1 cc.* and vials of 10 cc., *40 units in 1 cc.* Literature on request.

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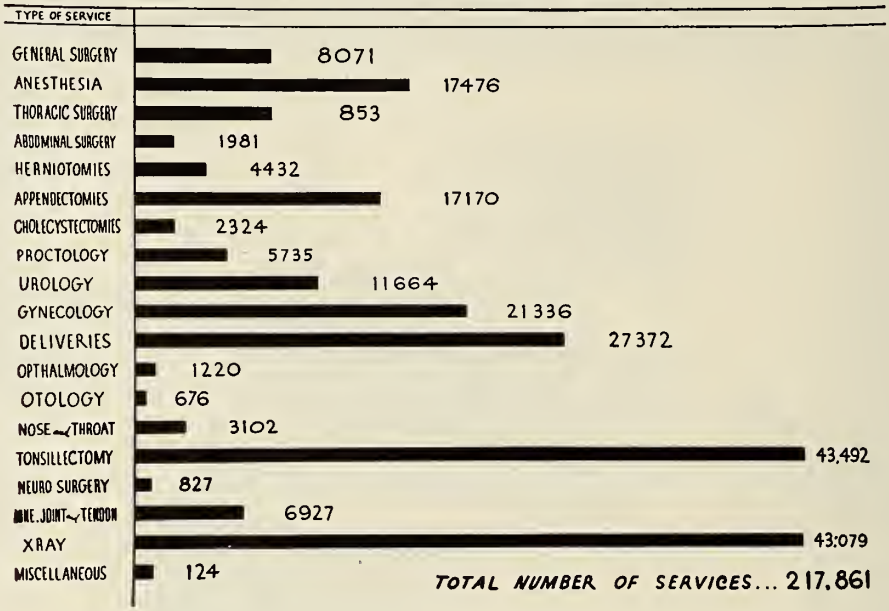
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MICHIGAN MEDICAL SERVICE

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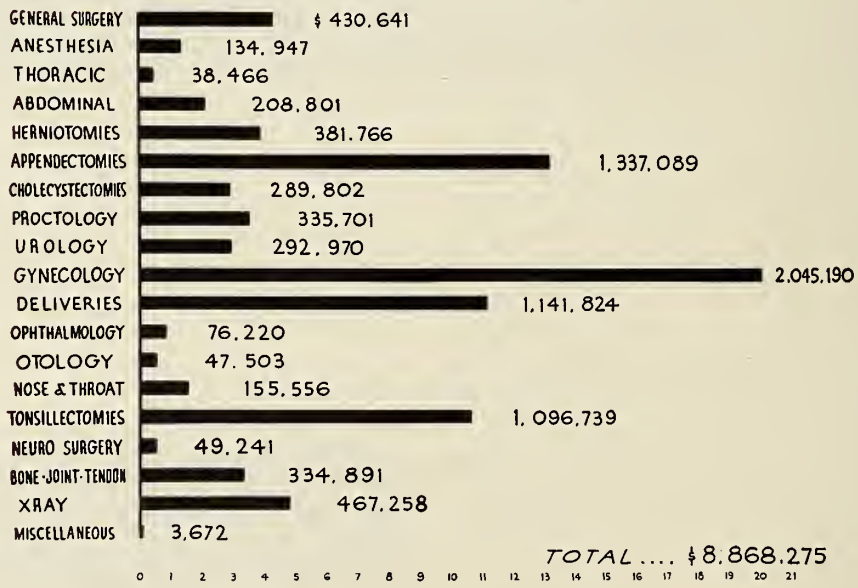
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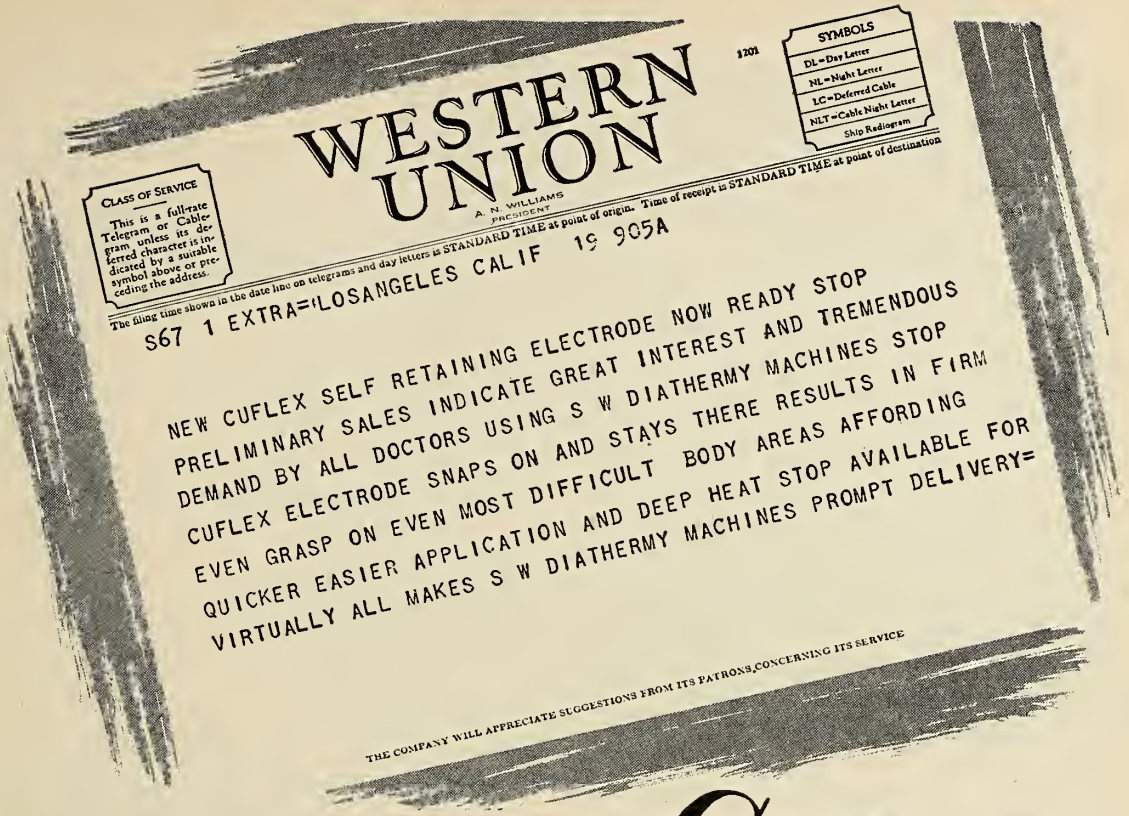


MICHIGAN MEDICAL SERVICE

PAID TO DOCTORS FOR SERVICES RENDERED

APRIL 1, 1942 TO MARCH 31, 1945




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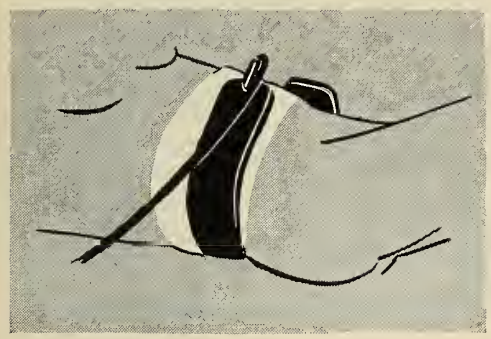
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DEMAND BY ALL DOCTORS USING S W DIATHERMY MACHINES STOP
CUFLEX ELECTRODE SNAPS ON AND STAYS THERE RESULTS IN FIRM
EVEN GRASP ON EVEN MOST DIFFICULT BODY AREAS AFFORDING
QUICKER EASIER APPLICATION AND DEEP HEAT STOP AVAILABLE FOR
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THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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THE ELECTRODE THAT VASTLY IMPROVES S. W. DIATHERMY TECHNIC



- Saves time
- Insures firm, even contact
- Simplifies application to difficult parts
- Provides deep penetrating heat
- May be used with virtually all makes S. W. Diathermy machines.

CUFLEX may be ordered through Randolph's Today

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FREE ILLUSTRATED BROCHURE DESCRIBING CUFLEX applications and prices

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CITY_____ ZONE____ STATE_____

Veteran's Procedure in Applying for Out-Patient Treatment

(Bulletin released to Counselling Centers of Michigan by the Veterans Administration)

In the case of an established service-connected case, a veteran asking for out-patient treatment should fill out Veterans Administration Form No. 2827 (Application for Out-patient Treatment) and submit it to the Veterans Administration, Dearborn, Michigan. If form is not available, a letter of application for out-patient treatment for his service-connected disability may be submitted. It must be understood that he can only apply for out-patient treatment for his service-connected disability.

In the case of a veteran recently discharged whose claim awaits adjudication, he should fill out Veterans Administration Form 2827 or submit a letter asking for out-patient treatment. It must be ascertained that the veteran has filed an application for a pension. If not, Veterans Administration Form No. 526 (Application for Compensation or Pension) completed should accompany this application for treatment. Veterans should also submit an affidavit stating that he received treatment while in the Service for the disability for which he is asking treatment.

The veteran who has filed Veterans Arministration Form 2827 or submitted a letter asking for out-patient treatment and same has been duly authorized by the Veterans Administration should submit the letter of authorization to his local physician for treatment. After the treatment, given as per the authorization, completed bills for fees should be submitted by the physician each month to Michigan Medical Service who will pay same by their own check.* Michigan Medical Service will then make a consolidated report of all cases paid to the Veterans Administration which in turn will reconcile same and pay in a lump sum. This will cut down red tape and should give fast service to the veteran who is presumed to have a service-connected or aggravated disability and is awaiting adjudication of his claim. Veterans who are in need of this service should contact their local counselling center which will give them the information desired in filing the claim, et cetera. The actual filing of claims is done by the veterans organizations, namely: the American Legion, Veterans of Foreign Wars, Disabled American Veterans and the American Red Cross.

It should be remembered that all forms and correspondence on matters relative to out-patient treatment should be forwarded to the Veterans Administration, Dearborn, Michigan.

*According to the Uniform Fee Schedule for Governmental Agencies adopted by MSMS House of Delegates, September 19, 1945.

ENGLAND'S STATE MEDICAL PROPOSAL

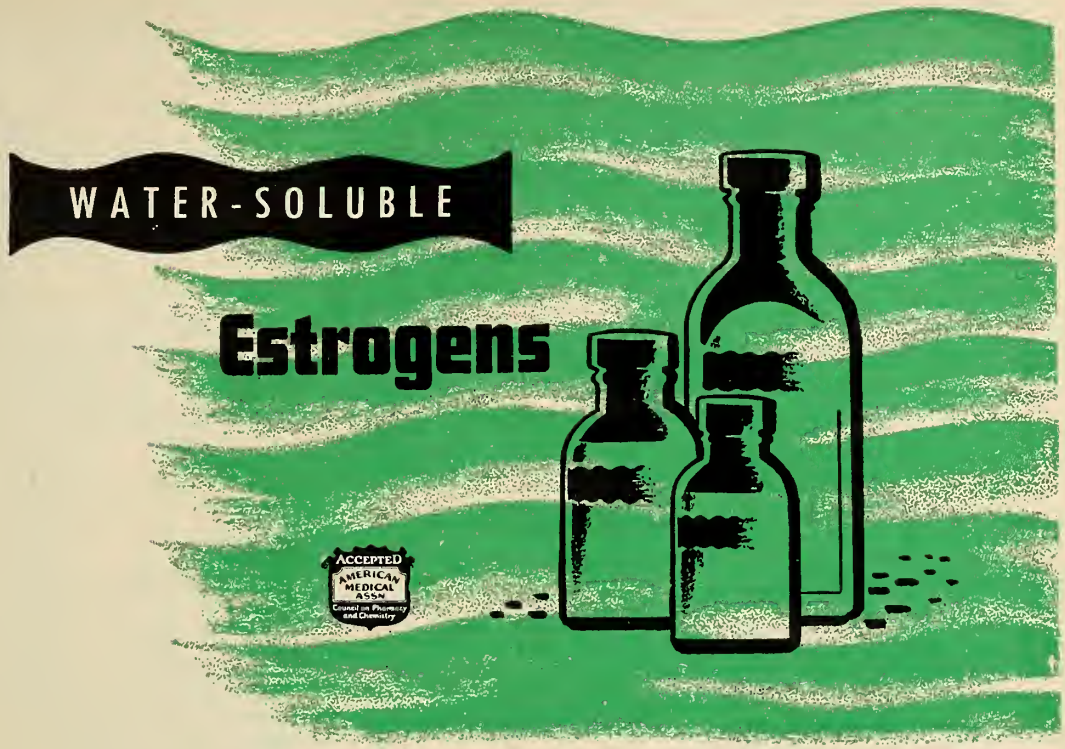
(Continued from Page 564)

drafting of the bill but few of its recommendations were accepted.

The only charges will be for repair of spectacles, false teeth and other appliances damaged through negligence on the part of the patient and for provision of domestic health and special domestic equipment in maternity cases and convalescence. Private rooms in hospitals will be provided free where medically necessary, providing they are available.

Considering the labor party majority in Parliament, this bill is certain of passage; however much criticism may result in alterations of certain details. This bill will genuinely place the health of the entire population in the hands of the state. The Socialists are jubilant at what they consider a triumph.

Have You Made
Your Hotel Reservation
for the
1946 Detroit Session
of the
Michigan State Medical Society
September 25-27
?
Turn to Page 566 for
Full Information and Reservation Form



Estrogens are excreted by the kidney not as free chemical compounds but as *conjugates*. In this natural form, the equine estrogens . . . estrone, estradiol, equilin, equilenin, and hippulin . . . are present as water-soluble sulfates which are highly active when administered orally. Under hydrolysis, however, the conjugation is destroyed and the estrogens are converted to free chemical compounds which are water insoluble and comparatively inactive orally.

In "PREMARIN", the equine estrogens are carefully protected against hydrolysis to preserve their highly desirable characteristics. "PREMARIN", therefore, is *water soluble* and orally effective, making possible the control of menopausal symptoms with tablet or liquid medication.

An extensive bibliography on "PREMARIN" attests to its high therapeutic effectiveness, its comparative freedom from toxicity, and to the fact that treatment is usually followed by a general feeling of well-being.

"Premarin"
REG. U. S. PAT. OFF.

CONJUGATED ESTROGENS (equine)

Tablet No. 866 (1.25 mg.) Tablet No. 867 (Half-Strength) (0.625 mg.)
Liquid No. 869 Each teaspoonful is equivalent in potency to one "Premarin" Half-Strength Tablet

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AYERST, McKENNA & HARRISON Limited • 22 EAST 40TH STREET • NEW YORK 16, N.Y.

Michigan Foundation for Medical and Health Education

This Foundation was sponsored by and has the enthusiastic endorsement of MSMS. A goal of $100,000 in contributions, for the year ending September 25, 1946, was set by retiring President A. S. Brunk, M.D., who offered to contribute $1,000 if $99,000 were contributed in a year's time. Almost fifty-seven per cent (57%) of the goal has been reached!

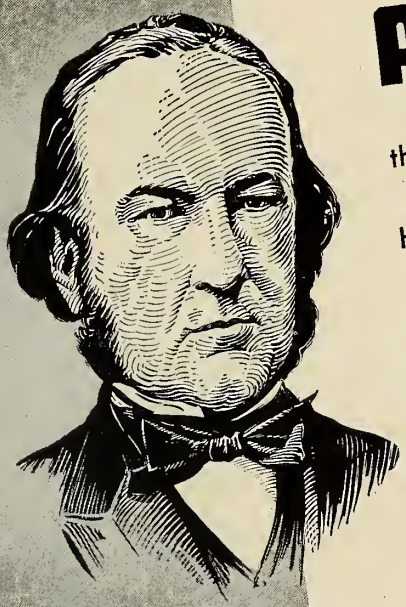
Your help in interesting other doctors of medicine and laymen to contribute to the Foundation, during these days of high taxes, is invited. A pledge card is printed below for your convenience.

From September 18, 1945, to March 15, 1946

Allegan County Medical Society	$ 85
Anonymous, in Memory of his Mother	1,000
Regis V. Asselin, M.D., Detroit	5
R. H. Baribeau, M.D., Battle Creek	50
Barry County Medical Society	50
M. G. Becker, M.D., Edmore	1,000
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85
C. D. Brooks, M.D., Detroit	1,000
J. D. Bruce, M.D., Ann Arbor	1,000
A. S. Brunk, M.D. Detroit	1,000
E. I. Carr, M.D., Lansing	1,000
L. G. Christian, M.D., Lansing	100
Clinton County Medical Society	50
C. V. Costello, M.D., Holland	1,000
H. H. Cummings, M.D., Ann Arbor	1,000
A. C. Curtis, M.D., Ann Arbor	15
J. S. DeTar, M.D., Milan	1,000
Dickinson-Iron County Medical Society	80
Eaton County Medical Society	70
A. C. Furstenberg, M.D., Ann Arbor	1,000
L. J. Gariepy, M.D., Detroit	1,000
Genesee County Medical Society	1,000
Robert W. Gillman, M.D., Detroit	1,000
Grand Traverse-Leelanau-Benzie Co. Med. Soc	167.50
Gratiot-Isabella-Claire County Medical Society	125
T. J. Heldt, M.D., Detroit	25
Hillsdale County Medical Society	95
L. J. Hirschman, M.D., Detroit	1,000
L. E. Holly, M.D., Muskegon	1,000
Houghton-Baraga-Keewenaw Medical Society	140
R. J. Hubbell, M.D., Kalamazoo	1,000
Huron County Medical Society	55
Wm. A. Hyland, M.D., Grand Rapids	1,000
Ingham County Medical Society	1,572.50
S. W. Insley, M.D., Detroit	1,000
Jackson County Medical Society	350
Joint Committee on Health Education	1,000
Francis Jones, M.D., Lansing	1,000
F. H. Lashmet, M.D., Petoskey	100
Lenawee County Medical Society	125
Manistee County Medical Society	100
F. F. McMillan, M.D., Charlevoix	100
Mason County Medical Society	35
Mecosta-Osceola-Lake Co. Med. Soc	45
H. A. Meinke, M.D., Hazel Park	50
Menominee County Medical Society	55
Michigan Medical Service	10,000
Mrs. K. B. Miner, Flint (in memory of F. B. Miner, M.D.)	1,000
Monroe County Medical Society	145
H. L. Morris, M.D., Detroit	1,000
Muskegon County Medical Society	310
Cora Boyce Neal, Grand Rapids	1,000
Ontonagon County Medical Society	15
Wm. H. Parks, M.D., Petoskey	100
A. W. Petersohn, M.D., Battle Creek	25
Lawrence Reynolds, M.D., Detroit	1,000
J. M. Robb, M.D., Detroit	1,000
John Rodger, M.D., Bellaire	100
St. Clair County Medical Society	220
G. B. Saltonstall, M.D., Charlevoix	1,000
E. F. Sladek, M.D., Traverse City	5,000
Ferris N. Smith, M.D., Grand Rapids	1,000
H. B. Steinbach, M.D., Detroit	100
R. H. Stevens, M.D., Detroit	1,000
C. L. Straith, M.D., Detroit	1,000
R. H. Strange, M.D., Mt. Pleasant	1,000
Jerrian Van Dellen, M.D., East Jordan	100
Ralph Wadley, M.D., Lansing	1,000
R. V. Walker, M.D., Detroit	1,000
H. L. Weitz, M.D., Traverse City	100
C. G. Wencke, M.D., Battle Creek	10
John O. Wetzel, M.D., Lansing	1,000
E. R. Witwer, M.D., Detroit	1,000
Margaret H. Zalen, M.D., Kalamazoo	5
	$56,893.81

(See page 582 for pledge card)

MASTER BUILDERS of ENDOCRINOLOGY



CLAUDE BERNARD
(1813-1878)

Claude Bernard has been rightly called the founder of experimental medicine. His work is associated with three great problems—pancreatic secretion, glycogen, and vasomotor nerves.

His work on the pancreas, and his studies on blood sugar and the glycogenic function of the liver, form the basis for our present knowledge of pancreatic function.

Aware of our responsibility to maintain the standards set by the early investigators, Harrower is dedicated to the task of developing superior products that physicians may continue to prescribe with confidence.

We adhere to high scientific and technical standards in the manufacture, assay, and control of Harrower endocrine and pharmaceutical products.

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Glendale 5, California
New York 7 · Dallas 1 · Chicago 1

Protection Under Michigan's Voluntary Health Program

In less than seven years one of every four residents of Michigan has voluntarily obtained Blue Cross protection. The following table shows the growth of the Blue Cross Plans—Michigan Hospital Service and Michigan Medical Service.

Michigan Hospital Service The Blue Cross Hospital Plan	*Michigan Medical Service* The Blue Cross Surgical Plan
Persons Enrolled	Persons Enrolled
1939— 74,236	1940—114,627
1941— 823,053	1941—407,052
1943—1,061,882	1943—571,015
1945—1,272,024	1945—858,235

Present National Blue Cross Enrollment—21,000,000 persons

Present National Rate of Growth—12,000 new subscribers daily

Number of Patients

Half a million and more men, women and children have received services "paid for in advance" through the Michigan Blue Cross. Hospital patients total more than 568,834; surgical patients more than 303,469.

Non-profit Operation

The Michigan Blue Cross Plans are organized under special enabling acts providing for non-profit operation.

Practically all of Michigan's recognized, non-profit general hospitals share in the operation of Michigan Hospital Service. The Michigan State Medical Society sponsors Michigan Medical Service.

Operating overhead of the Michigan Blue Cross Plans is at the remarkably low figure of approximately 10 per cent of earned income.

Distribution of Subscribers Payments

Michigan Hospital Service
Inception to January, 1946

Paid for hospital bills	88.49%
Operating cost	10.49%
Reserve for epidemics, etc	1.02%

Michigan Medical Service

Paid for surgical services	82.87%
Operating cost	12.53%
Reserve for epidemics, etc	4.60%

MICHIGAN FOUNDATION PLEDGE CARD

Name .....

Office Add..... City.....

Res. Add. ..... City.....

I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION
2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning September 19, 1945, the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
$	$	$

My contribution is

Please Check Your Choice [√]

(1) In Cash ☐ to be paid in the total sum ☐ or in annual payments of $.....

or **(2) In War or Victory Bonds** ☐ to be paid in the total sum ☐ or in annual payments of $.....

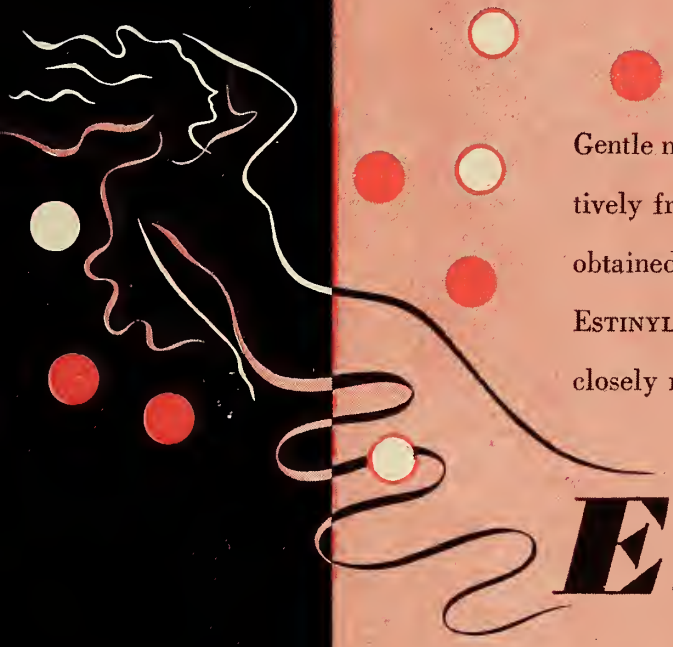
or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

.....

or **(5) In my Will** ☐

SIGNATURE .....



Gentle menopausal therapy

Gentle natural therapy of the menopause, relatively free from untoward side effects may be obtained conveniently and economically with ESTINYL (ethinyl estradiol), an oral estrogen closely related to the true follicular hormone.

ESTINYL

By virtue of its origin and composition ESTINYL favors an easy and calm transition, and yet because of its great oral potency dispels climacteric symptoms rapidly. For the average menopausal patient one tablet of 0.05 mg. daily is usually sufficient, but two or three tablets may be used if required.

ESTINYL Tablets are best administered at bedtime. Available in two strengths—0.05 mg. (pink) and 0.02 mg. (buff) tablets. Bottles of 100, 250 and 1000.

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Editorial Comment

FEDERAL MEDICINE?

If any one *still* thinks that it would be a good idea to have Federal control or Federal management of the affairs of medicine now is a truly excellent time for such a one to cast an eye about, to incline the ear, and to survey the scene of American life as it is being currently directed from above.

Would anyone in even partial possession of his senses care to see the institutions and practice of medicine under the control and direction of such persons as are currently capering, sounding off, filibustering, and "politicking" about the national Capitol? A sad picture.

Perhaps it made sense to fiddle while Rome burned in Nero's time. We wouldn't know. But at that time there was no question of the Federal control and direction of medicine.

Since then, however, a serious, scientific, and responsible profession has builded upon the foundations laid down by Hippocrates and Galen an institution and practice of medicine unreservedly and unqualificdly dedicated to the sole interest of the sick, to the promotion of the public health, and now to the advancement of preventive medicine.

The very foundations of such a structure are facts and scientific experiment to develop and uncover more facts, to create better public health, more effective preventive measures.

It should be apparent to anyone who has watched and followed the blundering, red-tape-ridden and logorrheic attempts of the Federal government to supervise the current food, housing, transportation, and production muddle that here is no agency to be trusted with direction of the affairs of medicine. To go no deeper into the question: Why should such a blundering government undertake to muddle up something *more* when it cannot now even unmuddle the things it is supposed to know and do something about?

Consider the picture. Shortages of nearly everything but oratory. Whole cities at times without fuel, basic communications systems tied up, national labor relations deteriorating in indecision, ineffectiveness and appeasement for political purposes, insufficient housing, little fuel for existing homes—to mention only a few of the things which might be enumerated.

Is this a government on the record, to be entrusted with the affairs of sick people as the Wagner-Murray-Dingell Bill proposes? A government that cannot or at least does not assure to well people even the basic necessities for living?

The picture is different if the objective sought is to bring all living standards down to the level of the lowest common denominator of a bare, cold, cheerless, and haphazard existence. Then, perhaps, it would be at least consistent that even the sick should be subjected to the same measure of inefficiency, wants, lacks, and deprivations as the well must now endure.

The picture is too dismal to contemplate. A government apparently too much concerned with its own perpetuation, seemingly reluctant to secure the welfare of the whole people against the baronial raids of stubborn organized minorities, indecisive, hesitant, does not seem to us qualified by virtue of these characteristics to be the ideal mentor of medicine and guardian of the sick.—Editorial, *New York State Journal of Medicine,* March 15, 1946.

MINIMUM UNIFORM FEE SCHEDULE

The Michigan State Medical Society has recently accomplished a bit of constructive action outlining a Uniform Fee Schedule for Governmental Agencies. This schedule has been officially adopted by the Michigan State Society for wards and dependents of government, effective January 1, 1946.

The physicians of Michigan believed that the costs of medical care should be evaluated on a similar basis with any other commodity; in other words, the State of Michigan was forced to pay as much for a truck whether it was to be used for hauling material to the State Capitol building or to a county poor farm. It was therefore considered that medical care should command the same fee whether the individual being treated were an occupant of the State Capitol or the county poor farm. With this in mind various committees carefully considered the contentious problem of medical fees. Too often we are led to believe that we as physicians set our own fee

(Continued on Page 590)

YOUR GROWING PRACTICE

needs this

X-ray Diagnostic Unit



KELEKET KXP-100
DIAGNOSTIC UNIT

YOU physicians who have longed for the convenience of X-ray equipment right in your own office will find everything desired in this KELEKET KXP-100 Diagnostic Unit!

It has sufficient power to take care of all radiographic and fluoroscopic requirements in the vertical, horizontal, and Trendelenburg positions. It is extremely easy to operate, because of the famous Multicron control with the KELEKET fixed milliamperage feature. A space only 8 x 10 ½ feet is adequate for the complete installation . . . and the total cost is surprisingly low!

Imagine how valuable this KELEKET Diagnostic Unit will be in your practice. You'll obtain brilliant films of fine diagnostic quality, even of the skull, abdomen and other heavy parts of the body. You'll be able to confirm your clinical diagnoses quickly, *right in your own office.*

America today is more "X-ray conscious" than ever before. Investigate this KELEKET KXP-100 Diagnostic Unit now.

Call or write us direct

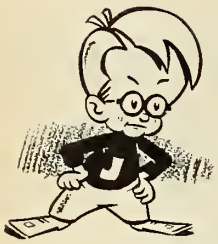


THE EVANS-SHERRATT COMPANY

Columbia 2310-2311

1238 Maccabees Building — Detroit 2, Michigan

Introducing Little Joe Genius!



This little feller is a thoughtful guy. He's trusting but he just isn't satisfied until he gets ALL the FACTS. Then he speaks his mind. Little Genius is a mighty good citizen. . .

Little Joe Genius believed everything that was told him. But when he was told two things that didn't agree . . . well, he just HAD to find out WHAT TO BELIEVE. He just couldn't seem to understand when people told him about ISSUES. He liked FACTS. He thought that if everybody could just get ALL the information on the subject, why then, SENSIBLE FOLKS would agree.

Little Genius studied lots of subjects but because he wanted to be healthy he studied HEALTH. BUT . . . He ran smack into an ISSUE.



The ISSUE was: Did he want the government to operate on him, or did he want his family doctor? No, that wasn't it. Let's see . . . Did he want the government to run medicine just like it did the Army? . . . or did he want to go to his family doctor and tell him his troubles and get fixed up?

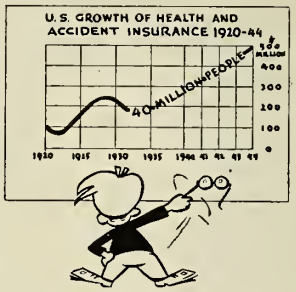
Little Genius thought: "Here is a big ISSUE. I'd better get the FACTS." So, he read books, studied statistics, talked to all sorts of folks.



"You know," said Little Genius, scratching his head in his deliberative way, "it's like a lot of ISSUES. Once you get the FACTS why the old Issue just melts like a block of ice when the sun shines!

"What are the facts, Little Genius?" I asked.

"Well," Little Genius frowned thoughtfully: "First, I guess I should tell you what the situation is now. In Michigan and plenty of other states there are lots of voluntary medical and hospital plans. They're growing fast! Folks appreciate how valuable their service is.



"The majority of these are non-profit plans approved by the doctors and the State Legislature. There's the Michigan Hospital Service and the Michigan Medical Service for example. Under those plans anybody in the state can use any doctor he wants and the doctor and hospital bills will be paid for him and his whole family. It costs only around 3 or 4 dollars a month for either plan.

"Is that for the whole family?" I asked.

"That's right . . . the whole family," answered Little Genius. "Why, Jerry Jones in Detroit had three kids in the hospital for tonsilitis and then fell down and broke his leg. All he had to pay was their taxi fare home from the hospital."

"What about this Wagner-Murray-Dingell Bill that's been introduced in Congress?" I inquired.

Little Genius frowned one of his worst frowns. "The FACTS tell me I CAN'T AFFORD IT. That Bill was introduced by Senators Wagner and Murray as a so-called 'National Health Act of 1945' but the Facts are that it won't make us a darned bit healthier and its going to make our pocketbooks downright SICK."

"Honestly, I JUST CAN'T AFFORD IT," Little Genius repeated. "Just for medical care alone we taxpayers would have to pay $3,000,000,000 a YEAR and that isn't enough for all the medical benefits 'promised' under the Wagner-Murray-Dingell Bill. Most government authorities say it would run around 5 or 6 billion dollars. In addition, we'd have to pay the salaries of thousands of folks needed to run the outfit: the clerks, the lawyers, the statisticians and the investigators. Why, in England, *besides* the doctors, they hire one employe for every 100 people insured, so in the U. S. that would mean 1,500,000 NEW GOVERNMENT EMPLOYES. If the average salary was $2,000 that would cost $3,000,000,000 MORE each year. On top of that is ANOTHER

(Continued on Page 590)

This article, in pamphlet form, is being distributed to the laity by members of the MSMS. It is the first in a series to be presented monthly in THE JOURNAL. In the June issue, Little Genius will have something to say on Compulsion.

White's SULFATHIAZOLE GUM*

White's Sulfathiazole Gum now has been used with marked success in many thousands of cases of miscellaneous infections of oral and pharyngeal tissues, notably acute tonsillitis and pharyngitis, septic sore throat, infectious gingivitis and stomatitis, Vincent's infection; also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

CLINICAL ADVANTAGES:

A single tablet chewed for *one-half to one hour* provides a salivary concentration of locally active sulfathiazole averaging approximately 70 mg. per cent. Moreover, resultant blood levels of the drug, even with maximal dosage, are so low (rarely reaching 0.5 to 1 mg. per cent) that systemic toxic reactions are virtually eliminated.

Supplied in packages of 24 tablets, sanitaped in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.

A product of

WHITE LABORATORIES, INC.

Pharmaceutical Manufacturers, Newark 7, N. J.

INTRODUCING LITTLE JOE GENIUS

(Continued from Page 586)

THOUSAND MILLION for public health service and health centers. And then there's the cost of building hospitals besides. Why altogether the cost would run up around $12,000,000,000. That's a DOZEN THOUSAND MILLION DOLLARS and that's TOO MUCH!

"Do you know how much, it was said in Congress, our tax would be?" Here Little Genius who had the FACTS didn't wait for me to reply. "They say, 'about 18% of pay rolls would be needed.' I tell you I JUST CAN'T AFFORD IT.



"If they're thinking about voting on that bill, I'd better write my Congressman about this, hadn't I?" I asked.

"Sure." Little Genius was emphatic. "Write Your Congressman. He wants to know what Sensible Folks think! *I'm* going to write him RIGHT NOW!" So he wrote to Washington, D. C.:

Dear Mr. Congressman:

For Pete's sake . . . and for my sake and my country's sake—keep that Wagner-Murray-Dingell Bill tied tight in committee. We taxpayers can't afford another payroll tax—an 18% one this time—just to make more jobs and power for bureaucrats.

Let's give the doctors a chance to sell their Voluntary Health Plan to the people. If it works—and the docs ought to know how to run their own business—more taxes won't be needed.

Yours,
Little Joe Genius.

Follow the example of Little Genius. Write your Congressman in Washington, D. C.

MINIMUM UNIFORM FEE SCHEDULE

(Continued from Page 584)

and we lose sight of the fact that in the long run the fee is really determined by the individual patient. For instance, if the patient feels the fee is too high, he either pays nothing or what he believes is a reasonable expenditure for the services received. Coercion to obtain the balance is often far from successful.

It is anticipated that this uniform fee schedule as arranged for governmental agencies in Michigan will be adopted in the future by all groups, such as state agencies, aid to the blind program, vocational rehabilitation, etc. It is understood that this is a minimum fee schedule and is considered flexible to the extent that any fee may be raised upon occasion. It has the advantage of affording in one brochure a reasonably official basis for the public to judge just what the expense of any medical or surgical procedure will cost.

Here in Iowa we have a fee schedule as worked out by Iowa Medical Service. Other groups have in the past published fee schedules which differ in certain respects. The Michigan plan certainly has definite advantages in that it may be used not only by governmental agencies but for any public or private group in the state.—Editorial, *Iowa State Medical Society Journal*, March, 1946.

ST. CLAIR COUNTY MEDICAL SOCIETY CLINIC

All members of the Michigan State Medical Society are cordially invited to attend the St. Clair Medical Society Clinic at St. Clair Inn, June 14, 1946, and enjoy the following splendid program:

Afternoon Session

2:00 P. M. Some Aspects of Diabetes Mellitus in Practice—Robert Kerr, M.D., Physician to the Toronto General Hospital and member of the Faculty, Toronto University Medical School.

3:00 P. M. Diagnosis and Treatment of Chronic Diarrhea—K. J. R. Wightman, M.D., Physician to the Toronto General Hospital and member of the Faculty, Toronto University Medical School.

4:00 P. M. Treatment of Varicose Veins and Complications—J. T. R. Mills, M.D., Surgeon to the Toronto General Hospital and member of the Faculty, Toronto University Medical School.

5:00 P. M. Present Status of Biliary Disease—Roscoe R. Graham, M.D., Surgeon to the Toronto General Hospital and Associate Professor of Surgery, Toronto University Medical School.

6:30 P. M. Dinner, St. Clair Inn.

Evening Session

8:00 P. M. Panel Discussion of Diseases of the Stomach and Duodenum led by Roscoe R. Graham, M.D.

Panel includes:

(1) Fred C. Coller, M.D., Professor Surgery, University of Michigan.
(2) L. C. Fallis, M.D., Surgeon, Henry Ford Hospital, Detroit.
(3) Robert Kerr, M.D.
(4) K. J. R. Wightman, M.D.
(5) J. T. R. Mills, M.D.

Note: Those attending are urged to enroll by one o'clock. Meeting promptly at two o'clock.

Committee: Dr. E. C. Sites, chairman, Dr. C. F. Thomas, Dr. C. S. Martin, Dr. E. W. Meredith, and Dr. W. A. Schaefer.



THYROBROM,* a brominated thyroid in tablet form, provides every pharmacological action afforded by thyroid U.S.P., with a minimum of toxic effects that ordinarily attend the administration of plain thyroid.

The therapeutic effectiveness of THYROBROM, and proof of its clinical advantages, are set forth in a recently published paper reporting a controlled study of 60 obese cases.† Administered in the same dosage as thyroid U.S.P., THYROBROM proved to be:

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Political Medicine

A GOOD EXPERIMENT

Without any fanfare and with only a modicum of the publicity it deserved, a program was inaugurated in Michigan last month which may well have a profound and far-reaching effect on future social legislation. If successful (and there is every reason to hope that it will be), it should serve as a pattern for a much expanded program—one by which the government could fulfill its responsibility in safeguarding the physical well-being of its citizens without at the same time subjecting them to the regimentation and other objectionable features so deplored in many of the proposals for public health insurance.

More than a half century ago, Pope Leo XIII enunciated the principle that "the first duty, therefore, of the rulers of the state should be to make sure that the laws and institutions, the general character and administration of the commonwealth, shall be such as to produce of themselves public well-being and private prosperity" and that "whenever the general interest or any particular class suffers, or is threatened with, evils which can in no other way be met, the public authority must step in to meet them."

It has been in accordance with this principle that Catholic scholars have insisted that the state has a responsibility to protect its citizens against the ravages of illness and to fill the need for health insurance which non-governmental agencies have to date failed so woefully to supply.

* * *

Dangers Recognized

These same scholars, however, recognized the dangers involved in the majority of the proposals sponsored by the proponents of "state medicine" or the so-called socialized medical care.

This whole problem was treated in this column several months ago, at which time I explained and praised the proposal of Dr. Stanley W. Insley for the operation of a "producers' co-operative" to be operated by physicians under the name of "The Michigan Medical Service." I mentioned that the plan had many worthwhile possibilities and deserved a trial by government before some perilous and less sound experiment be attempted.

I was particularly happy, therefore, to learn that an agreement had been reached between the Veterans' Administration and the Michigan Medical Service, whereby the latter will provide medical care to veterans for service-connected disabilities. Under the terms of the contract, which went into effect January 15, disabled veterans will have the right to select their own doctors, in most cases their family physicians or in other instances specialists in particular fields, with the cost of care defrayed by the Veterans Administration.

* * *

Cut Red Tape

No longer will it be necessary for Michigan ex-servicemen to leave their families and friends to seek medical attention in a governmental institution far distant from their homes. Minimized, too, will be the red tape and the consequent delay hitherto involved in seeking such care.

It has long been feared that it would take years to establish the necessary institutions and to assemble the required staffs to care for the needs of servicemen disabled in World War II. Such fears are now allayed for local veterans under this program.

Should the experiment prove successful in Michigan, it is expected that the Veterans' Administration will extend its operation to other states. Moreover, what the V. A. is able to do for veterans, the Federal Government could likewise do for all citizens—namely, purchase for the people of this nation health insurance from the doctors' own producers co-operative under a program administered by the doctors themselves and by which patients would be able to exercise free choice in the selection of physicians.—Rev. Raymond Clancy, *Wage Earner,* Detroit, Feb. 15, 1946.

* * *

SERVICES FOR UNMARRIED MOTHERS AND THEIR CHILDREN

One out of every twenty-five babies in our country is "illegitimately born," and the mothers of these children—half the time—are themselves little more than children, between fifteen and nineteen years old.

The difficulties these unmarried mothers and their children face present a challenge to hundreds of communities.

Providing the many services mother and baby may need—social case work, financial assistance, medical, nursing, and hospital service, legal advice, and assurance of a good family life for the baby—takes co-ordinated planning on the part of many community agencies if the job is to be done well.

What services should be available to unmarried mothers, how communities can plan to meet these needs, and what resources are available to local communities from the Children's Bureau of the U. S. Department of Labor, the Bureau of Public Assistance of the Social Security Board, and the American Red Cross are described in this little bulletin. These three agencies co-operated in its preparation.

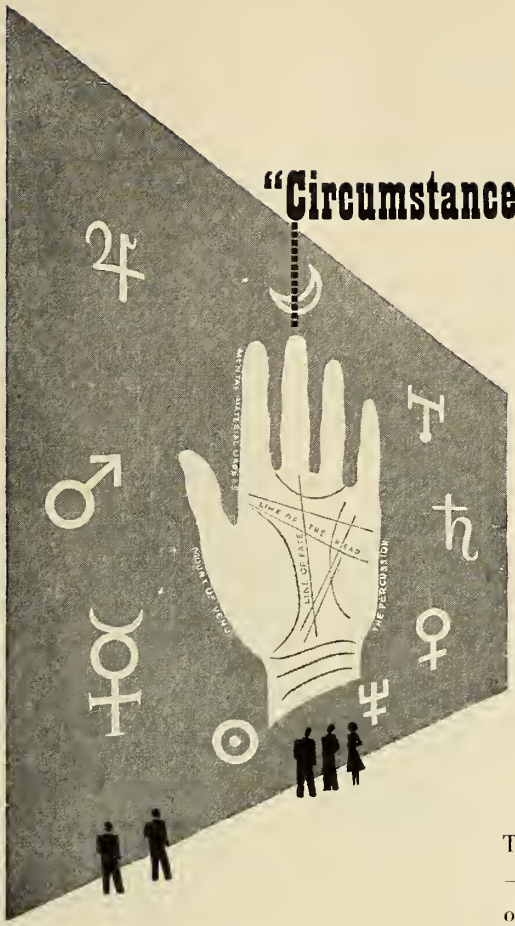
Here is a guide to planning useful to community leaders, local public officials, and private agencies, who are concerned with giving the baby born out of wedlock a fair start in life and his mother a helping hand over a difficult period.

The above is a news release from the Children's Bureau, and speaks for the Pepper Bill extending the services of the EMIC to all. Here is a group with an appeal to well doers, and here is another chance for the gradual encroachment on the practice of medicine, and the establishment of other bureaus and bureaucrat jobs. The following Washington news item shows what has already been accomplished.

WASHINGTON—(AP)—Uncle Sam footed the bill for 1,192 servicemen's babies born in Michigan during January under a continuing maternity and infant care program started during the war.

Maternity care is provided for wives of aviation cadets and of servicemen in the four lowest pay grades. Free

(Continued on Page 594)



"Circumstances over which I have no control"

The unpredictable can of course always happen in surgery —but by rigid adherence to aseptic routine and the use of an effective antiseptic, such as Tincture Metaphen, the surgeon can control the ever-present threat of infection. In Tincture Metaphen you have a very real assurance of high antiseptic power, prolonged action and relative freedom from tissue irritation. There are other outstanding qualities you will also appreciate—its distinctive orange stain clearly delineates the operative field —it does not affect surgical instruments or rubber goods, is quite stable when exposed to air—and *now costs far less than ever before.* Tincture Metaphen 1:200 is available through hospital and prescription pharmacies in bottles containing 1 fluidounce, 4 fluidounces, 1 pint and 1 gallon. ABBOTT LABORATORIES, NORTH CHICAGO, ILLINOIS.

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SERVICES FOR UNMARRIED MOTHERS

(Continued from Page 592)

medical, hospital and nursing care also is provided for their infants until they are one year old.

Wives and infants of honorably discharged veterans are eligible for aid, the children's bureau explained, if a wife was pregnant or if a child was under one year at the time of the serviceman's discharge.

Counting the January total, 39,712 wives and babies have received free care in Michigan since the start of the program there in May, 1943.

* * *

PRIVATE PROTECTION

Socialized medicine program gets a cool reception in House following showing by insurance industry that 40,000,000 persons already are covered by voluntary health and accident policies—a five-fold increase over 1939.

More than 400 companies now write health and accident insurance. Total premiums in 1944 were $525,000,000 for this class of business, exclusive of hospital service policies.

In addition, more than 5,000,000 persons carry prepaid medical care programs, covering hospital and surgical bills. Almost half of latter group are covered by employer-sponsored plans in industry. Next, 17,500,000 participate in Blue Cross Hospital plans.

Consolidating all these voluntary protection measures, Insurance Economics Society of America concludes that at least half the population insures itself against medical costs; another 40 per cent handle these emergencies on pay-as-you-go basis without hardship.—*Nation's Business*, February, 1946.

* * *

NEW YORK HEALTH PLAN SHELVED

The Commission appointed by Governor Dewey to study the question of compulsory health insurance for New York has reported a majority and a minority report. The majority report said:

"A comprehensive plan for medical care includes hospitalization; physician's care at home, in the office, and in the hospital; nursing care, diagnostic services, and limited dental care. The cost of this type of plan covering every resident of the state has been variously estimated but it would probably be at least $400,000,000 a year. This would mean a cost of at least $30 per capita. The commission is of the opinion that this sum represents too great an expenditure to be imposed on the people of the state, either directly or indirectly through governmental authority, until there has been more experience in the field of medical and hospital insurance.

"There would be serious difficulties in administering medical care to 13,000,000 people and avoiding abuses and deterioration in the quality of service. Furthermore, the facilities in the state with respect to medical, dental, nursing and hospital care would need to be greatly expanded."

The report said the commission was unwilling to recommend "an experiment on such an enormous scale and at such cost and risk" and endeavored to find "some plan less than a comprehensive plan, which might be used to test out the practicability of a compulsory prepayment plan of medical care," but that there appeared to be no such plan on which the members could agree.

A minority report signed by five other members of the Commission recommended a start with a comprehensive medical, dental, hospital and nursing care program for children under eight years of age.—*New York Tribune*, February 16, 1946.

* * *

BRITISH HEALTH PLAN ABOLISHES DOCTORS' BILLS

LONDON, March 21—The blueprint of England's plan to socialize the medical profession, lock, stock, and barrel—hospitals, patients, physicians, and dentists—was made public today. The British Medical association, which includes most of England's 56,000 doctors, immediately started marshalling its forces to fight the measure, which has been in the wind for three years.

The main features of the health service bill, which will be presented to parliament soon, are:

1. All medical services will be available to everyone without fees except in special cases.
2. All hospitals and their equipment will be taken over by the government.
3. Doctors joining the service will be compensated for their practices and will work as employes of the state.

Aneurin Bevan, Laborite minister of health, who prepared the bill, left loopholes which, at first glance, would seem to insure that doctors and patients who so desire could maintain their former personal relationship. The measure provides, for example, that no physician can be forced to join the program, patients are free to choose their own doctors who in turn, can accept or reject any patient, and anyone wanting to can pay for and receive private care and a private hospital room.

But other provisions of the bill make it virtually impossible for a doctor to practice outside the service, so the medical association charges that the bill in its present form will make the entire profession part of the civil service.

* * *

Cost $600,000,000 a Year

The plan is expected to cost the government $600,000,000 a year, and Bevan indicated it will go into effect early in 1948.

Physicians joining the service will be paid for the good will of their practices up to more than $250,000,000. But after the start of the service it will be an offense punishable by fine and imprisonment to sell or buy a practice.

The plan suggests a fixed salary, varying according to experience and circumstances, plus a yearly fee for each patient who signs up with the doctor. In addition, the doctor will receive 2¾ per cent interest on the good will value of his practice. The principal will be paid upon his death or retirement.

Each physician will have a contact for service with a newly established body called an executive council in each county. On a higher level is the medical practices committee, charged with regulation of practices. All doctors wishing to join the program or to move to another area must secure permission from the committee.

(Continued on Page 698)



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EUROPEAN INFLUENZA MISSION REPORTS FINDINGS

With the recent history of influenza strongly indicating that an outbreak might occur during the winter of 1945, the Chief Surgeon, European Theater, Major General Albert W. Kenner, requested the assistance of The Surgeon General in establishing a diagnostic and control program.

Directives establishing an influenza program were prepared in conjunction with Colonel Tom Whayne, Chief, Preventive Medicine Division, and Colonel Jesse Edwards, Theater Laboratory Consultant.

Facilities for the diagnosis of influenza through use of chicken cell agglutination-inhibition antibody and virus isolation techniques were put in operation at the Theater Medical Laboratory at Darmstadt. Studies were instituted to determine the magnitude of the respiratory disease problem and the nature of the current respiratory diseases both in the military and civilian populations.

The Influenza Mission toured the military hospitals, civil internee camps, prisoner-of-war enclosures and civilian hospitals in the U. S. Zone of Germany and other areas where American soldiers were stationed. Hospital wards were visited, and clinical, epidemiological and laboratory aspects of influenza were discussed.

The findings of the Mission are extremely interesting from the epidemiological point of view. Clinical studies revealed the sporadic occurrence of influenza in the military and civilian populations. It was determined by laboratory studies that influenza A and B were present simultaneously in these populations. Conditions incident to the present status of these mobile, constantly changing populations, were conducive to spread. However, during the winter period when the appearance of epidemic influenza was considered most likely, such spread did not occur in Germany, although rates for other respiratory diseases, diphtheria and streptococcus infections, continued to rise. The findings support the contention that the influenza viruses in interepidemic periods are maintained in a human host reservoir as sporadic cases. Influenza B in epidemic proportions occurred in the United States in December of 1945 and in England in January of 1946. These epidemics occurred, one might say, as expected. This expected occurrence contributed to the decision to initiate an Army-wide influenza vaccination program in October, 1945.

With conditions in Germany favorable for the spread of influenza and knowledge of the presence of the viruses there established, the absence of epidemic influenza last winter is inconsistent with the commonly accepted concepts of influenza epidemiology.

Influenza Virus Vaccine, Types A and B, are now released for general civilian use. This vaccine is a sterile concentrated suspension of influenza virus from the only known etiological types, both included. It is grown on chick embryos, and since it contains a trace of chicken protein, precautions should be taken in patients allergic to such proteins.

ARMY PROGRAM PREVENTS IMPORTING OF DISEASE

There is little or no risk of introducing foreign disease into the United States through returning military personnel from abroad, according to an announcement by the Office of The Surgeon General, which pointed out that the most careful estimates anticipate only moderate danger in a few cases.

This conclusion was reached after a world-wide survey by the Interdepartmental Quarantine Commission, which was jointly established by the Secretaries of War and Navy and the Administrator of the Federal Security Administration to study this problem.

With the end of the war and return of the bulk of combat forces, it is now possible to review actual results on a preliminary basis. Though tentative, highly optimistic conclusions appear warranted, the announcement stated.

To date no acute outbreak or secondary spread of an imported disease has been reported. While more slowly evident diseases may be identified later, it should be remembered that the traffic of war has gone on for four years, giving ample time for discovery of such diseases.

The 440,000 hospitalizations for malaria reported among Army personnel during the war fall short of pessimistic predictions for what has proved to be the commonest infectious disease of troops abroad.

Even with the consideration that a portion of infected persons are liable to recurrence after their return to the States, conditions in this country are generally unfavorable for the spread of malaria and the chances of community risk are very small.

The special danger of cholera, smallpox, plague, epidemic typhus, and yellow fever is a matter of historical record. Immunizations were employed against all these diseases by the Armed Forces along with water purification, environmental sanitation, and disinfestation and insect control. This preventive medicine program was exercised even under combat conditions and its effectiveness was shown by Army records. The high general level of sanitation, insect control, and alert medical care available here forms the final link in the protection of this country from imported diseases.

The risk of importing diseases from abroad has been less in some respects than in normal prewar traffic and the credit for these results has been attributed to the modern preventive medicine program of the Army and Navy.

Cases of exotic disease did occur, the announcement stated, but extensive investigation of likely hazards and critical application of preventive and corrective measures were effective in reducing risks to small proportions.

1946 DETROIT SESSION

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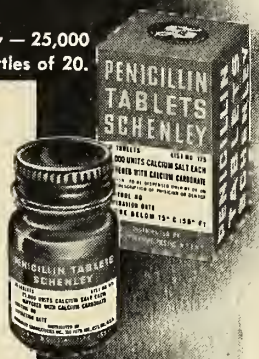
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Program of Health Legislation Beneficial to the People

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore be it

RESOLVED, That the following principles for a health legislation program be adopted:

1. Establishment in the President's Cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians, and under whose jurisdiction every federal bureau and office, whose duties are related to health and medical welfare, shall be grouped.

2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care by government grants-in-aid.

3. Provide federal or state loans, or guarantees of private loans, for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled, and carried on by those who own such facilities and by the medical profession.

4. (a) Establish state-wide voluntary non-profit health care programs, in every state, based on the free choice of purveyors of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractual arrangement for payment of charges from county, state or federal funds; as a service plan for all other governmental categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law.
   (b) Any further federal or state programs for expansion of medical service to be developed within the structure of the above-described program.
   (c) National co-operation with the proposed plans of Major General Paul R. Hawley of the Veterans Administration in the therapeutic administrations to veterans for service-connected disabilities. Also for the development of veteran facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments.
   (d) All state-wide medical care programs on either a service or indemnity care basis shall be incorporated under special state-enabling acts or by already existing state statutes relating to non-profit producers' co-operatives. This will provide for either a prepayment or a reimbursement contractual service.
   (e) Group co-operation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) programs, should be accomplished.

5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to advise all the people with respect to proven measures to prevent illness, hygienic and sanitary measures, and where to go to seek help when ill or injured.

6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans, and be it further

RESOLVED, That every state medical society be invited to study, adopt and activate these principles on the state level, and that they be submitted to the AMA Council on Medical Service and Public Relations for immediate consideration as a pattern for a national health program.

Adopted by Conference of Presidents and other Officers of State Medical Societies, December 2, 1945; referred by 1945 AMA House of Delegates to the AMA Council on Medical Service and Public Relations, December 5, 1945.

The JOURNAL

of the Michigan State Medical Society

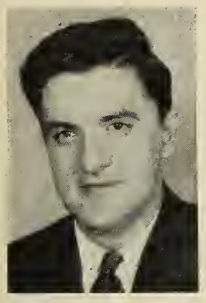
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Present Policies in the Treatment of the Severely Burned Patient

An Outline of Treatment Including the Use of Whole Blood Transfusions

By Henry J. Lange,, M.D.,
Kenneth N. Campbell, M.D., and
Frederick A. Coller, M.D.
Ann Arbor, Michigan



Henry J. Lange



K. N. Campbell

THE most recent review of the status of thermal burns lists some twelve unsolved and important problems in treatment.[40] The stimulus of the recent war in the elucidation of many of these problems has produced considerable progress. Certain forms of therapy which were formerly deemed advisable and adequate have been relegated to disuse, as for instance, the local use of Tannic Acid and similar agents.[26,55] Other measures, which had been discarded a number of years ago, now occupy the limelight, so to speak, because of a renewed appreciation of their value or as a result of further investigation.[1,2,31,58,62,63,64,75] Despite the voluminous literature concerning burn treatment, the need for a review article dealing specifically with policies and treatment is desirable. This article is written, therefore, to present a compact, but comprehensive outline of the present management of burns with a discussion of recent trends in therapy. The problems encountered in burns and their management will be presented in the sequence that is most frequently observed in the majority of these cases. A discussion of the physiological mechanisms involved and the experimental background of the therapy being employed will be included in the text where it is deemed appropriate.

The numerous problems of treatment are considered under the following headings:

I. Admission Appraisal of the Patient
   (a) Respiratory obstruction
   (b) Concomitant injuries

II. Prevention and Treatment of Burn Shock
   (a) Management of Anoxia
   (b) Environmental temperature of the patient
   (c) Immediate care of the wound
   (d) Infusion procedure.
   (e) Management of pain
   (f) Appraisal of the extensiveness of the burn
   (g) Selection of fluids for parenteral use
      (1) Recent trends toward the immediate and delayed use of whole blood transfusions

III. Local Treatment of the Burned Surface
   (a) General principles of wound treatment
   (b) Technique to be employed
   (c) Chemotherapy
   (d) The question of debridement and cleansing
   (e) Tetanus and gas gangrene prophylaxis
   (f) Management of burns of the eye
   (g) Management of genito-rectal burns
   (h) Management of burns complicated by fractures

Dr. Lange, Instructor in Surgery, received his M.D. degree from the University of Michigan in 1940. He has been a member of the Department of Surgery since graduation.
Dr. Campbell, who received his M.D. degree from Wayne University, did Extern and research work at the Alexander Blain Hospital, 1938-1940. He is Instructor in Surgery and Research Assistant in Surgery.
Dr. Coller is Professor of Surgery and Head of the Department, University of Michigan.
From The Department of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.

IV. The General Care of the Burned Patient
  (a) The nutritional status
  (b) The renal status
  (c) Liver function
  (d) Gastro-intestinal damage
    (1) Ulceration and hemorrhage
    (2) Vomiting
  (e) Summary of frequently used laboratory data
  (f) Emotional aspect of general care

V. The Principles of Skin Grafting
  (a) Local medicaments and chemical debridement
  (b) Autogenous and homologous grafts

VI. Contractures and Deformities

VII. Altered Physiologic Mechanisms Associated with burns

I. The Admission Appraisal of the Patient.

There is an admission appraisal of the general condition of the patient, particular attention being directed to conditions necessitating immediate or subsequent intervention, such as:

(a) Respiratory Obstruction[7,63]
  (1) Laryngeal or tracheobronchial edema secondary to inhalation of flame or noxious fumes
  (2) Foreign bodies (such as vomitus)
  (3) Massive, acute, pulmonary edema (usually occurs several hours after the burn). When it becomes necessary, tracheotomy must be carried out without delay[59]

(b) Concomitant Injuries[81]
  (1) Those producing serious hemorrhage or tending, in themselves, to precipitate severe shock, (fractures, internal injuries, et cetera).

The above factors will vary with the time interval which elapsed since the burn was sustained.

II. The Prevention and Treatment of Burn Shock

(a) *The Management of Anoxia* (Fig. 3).—The four recognized types of anoxia may occur in the severely burned patient if care is not taken to prevent or ameliorate them. (Anoxic anoxia with pulmonary edema, anemic anoxia with the secondary anemia, stagnant anoxia with shock, and histotoxic with improper medication (narcotic drugs)[6] and CO poisoning. This is an important phase of shock management which is frequently overlooked. It is important not only from the standpoint of disturbed organ function, but it is also well known that certain organisms, such as beta hemolytic streptococci multiply faster in the presence of even a slight anoxia.

The therapy to be instituted which has priority over every other consideration lies in the correction and maintenance of an adequate airway.

Oxygen administration in some form is almost a necessity in every severely burned patient when shock is impending or being treated. It may be administered by mask (B.L.B.), which gives the highest alveolar concentration, tent, or nasal tube. Where feasible 100 per cent oxygen by mask is the method of choice. It affords full saturation of available hemoglobin and in addition, affords an added slight advantage from the oxygen dissolved in the plasma. The advantage of not having a tent to contend with early in treatment is obvious since nursing care is more efficient in the absence of a tent, and the course of the patient can be more adequately followed by the physician in charge.

The rate of flow of oxygen should be maintained at 6.5-8 liters/minute. It should also be remembered that tents vary considerably in their efficiency and that, unfortunately, many of them are inadequate.

It has likewise been deemed inadvisable to administer oxygen under positive pressure in most cases. The dangers attendant to this procedure outweigh any minute advantages over the usual methods of administering oxygen.

If an element of carbon monoxide poisoning is present or suspected, a continuous stream of oxygen containing 5 per cent CO_2 is advisable to aid in the elimination of the carbon monoxide.[73]

(b) *The Environmental Temperature of the Patient.*—The practice of treating patients in "burn tents" and "burn rooms" is often as harmful and illogical as the old "ether bed."

Rapid heating aggravates shock in many instances by immobilizing available circulating blood in a reservoir of peripheral vasodilation.

There is evidence to show that a reduced temperature of the trunk and extremities of a burned patient may exert a protective effect. Theoretically, two facts appear significant: (a) locally, cold is known to inhibit pain, edema, infection, shock, toxic absorption, and tissue devitalization; (b) these are precisely the processes that need to be overcome in burn treatment.[21,30,43,67]

Experimental evidence, as well as clinical, favors a room temperature of 70 to 80° F. The patient's comfort may be relied upon in controlling room temperature unless the patient is unconscious. In the latter case there is no reason to suppose that any more external heat is necessary than would be required by a normal individual lying in bed.

In tropical climates, and during hot days in the temperate zones, actual cooling or air conditioning will prove helpful.

On hot, humid days, massive occlusive dressings may so reduce dissipation of heat that the patient's life may be endangered unless some means of heat dissipation is provided.

The factor of fever will definitely increase metabolism and produce increased nitrogen breakdown and excretion. The rate of increase in metabolism will vary from 7 to 13 per cent per degree rise in temperature.[57]

(c) *The Immediate Care of the Wound.*[3,73]—The burned surfaces are covered with sterile towels or, preferably, the patient is placed between sterile sheets. All the attendants and the patient are masked.

(d) *The Infusion Procedure.*—Intravenous equipment is set up. Hartman's solution or 5 per cent glucose in water is started if blood is not immediately available.

The smallest and most distal veins of an upper extremity are selected as the site of infusion. The reason for this becomes apparent within a few days when there are no longer any sites available for infusion. A "cut-down" exposure of collapsed veins may be necessary and in some cases becomes a life-saving procedure.

(e) *The Management of Pain.*[6] The use of morphine should be restricted to adults—and the dosage minimized. It should not be used if serious chest or head injuries exist. Only codeine is recommended for children. If hyperactivity of the patient is present, it may be due to fear, hysteria, or cerebral anoxia rather than pain from the burn site. The dangers attending the use of morphine in the presence of cerebral anoxia need no comment.[16,73]

Morphine is assuredly a sovereign remedy for pain—but even so, it is usually given in excessive doses. For analgesia, small doses (grs. 1/6-10mg.) given subcutaneously or intramuscularly are usually sufficient. It has been demonstrated that larger doses give very little additional analgesia, yet greatly augment undesirable effects, particularly respiratory depression.

When peripheral circulation is sluggish, morphine administered subcutaneously or intramuscularly may be absorbed slowly, or not at all. Failing to obtain the expected result, the physician may make the mistake of repeating the dosage; perhaps even several times. A dangerous situation may then develop, when, with improvement in circulation, rapid absorption of the total dose occurs leading to toxicity and perhaps even death.[6]

It is a wise policy to administer the morphine intravenously in such cases, using doses of grs. 1/8 to 1/6 (8 to 10 mg.), diluted in 5 to 10 c.c. of 5 per cent glucose and injected slowly over a period of thirty to forty-five seconds. Such doses may be repeated in fifteen to thirty minutes until the desired effect is obtained, i.e., analgesia.

TABLE I. APPRAISAL OF EXTENSIVENESS OF BURNS[8,50]

Percentage of Surface Area (Berkow)

Age	Head	Trunk*	Upper Extremities	Lower Extremities**
0	18	38	18	26
1	17	38	18	27
5	13	38	18	31
10	8	38	18	36
15	6	38	18	38
Adult	6	38	18	38

*Includes Neck and Genitalia. **Includes Buttocks.

Modified Table (Lund-Browder)

Age	Head	Trunk*	Upper Extremities	Lower Extremities**
0	19	34	19	28
1	17	34	19	30
5	13	34	19	34
10	11	34	19	36
15	9	34	19	38
Adult	7	34	19	40

*Includes Neck and Genitalia. **Buttocks.

The need of morphine may be minimized or eliminated by the administration of oxygen; avoiding debridement and cleansing; and by prompt application of vaseline pressure dressings.

(f) *The Appraisal of the Extensiveness of the Burn.*[8,50] The method of Berkow for the estimation of surface area is most useful. The modified table of Lund and Browder gives the estimates in greater detail. The differences, however, are minor, Table I.

The amended proportions for adults are not applicable to infants and children, where there is a relative increase in head size and a decrease in the size of the lower extremities. To a lesser ex-

tent, the trunk bears a similar relationship to the upper extremities.

The following figures are applicable to practically all cases:

Adults

Lower Extremities	38 per cent
Trunk	38 per cent
Upper Extremities	18 per cent
Head	6 per cent

The arms constitute three-quarters, the hands one-quarter of the surface area of the upper extremity. The thighs constitute three-sixths, the legs two-sixths, and the feet one-sixth of the surface area of the lower extremity. The anterior surface of the trunk constitutes 20 per cent and the posterior surface 18 per cent of the total trunk surface area (38 per cent). This includes the neck. The buttocks are included in the estimates for the lower extremities.

Children

Trunk	38 per cent
Upper Extremities	18-19 per cent

Head and lower extremities: Subtract age in years from 12 and add the difference to 6; the total equals head proportion. Subtract the same amount from 38 per cent to obtain lower extremities proportion. These will be approximate figures.

All burns should be estimated as to depth, i.e., first, second, or third degree. It is almost impossible in many instances, to accurately distinguish second from third degree burns at the time of injury.

(g) *The Selection of Fluids for Parenteral Use.* (1) *Recent Trends Toward the Immediate and Delayed Use of Whole Blood Transfusions.*— It would appear, from recent investigations, that the most effective management of burn shock is observed when a combination of whole blood intravenuously and electrolyte solution orally is used.[1,2,31,58] It has been well demonstrated, that immediately following a severe burn, hemolysis of red blood cells occurs [10,72] (as evidenced by hemoglobinemia) and that as much as 10 per cent of the remaining red cells possess a fragility greater than normal, hence are susceptible to further hemolysis.[10] It has likewise, been demonstrated that minute "perithermal" hemorrhages are a frequent accompaniment of burns, thus affording a second immediate loss of whole blood.[37] This immediate "anemia" is easily and frequently "marked" by the ensuing hemoconcentration secondary to fluid and protein loss into the burned area, so much so, *that a loss as great as 40 per cent of the total red cell mass may remain undetectable immediately following the burn.*[70] The progressive breakdown of red blood cells may continue for as long as sixty hours or even longer in some cases.[73] Other contributory "losses" of whole blood then occur in relation to the ensuing shock. That whole blood is effective in combating burn shock has been well demonstrated, more so, when electrolyte solutions are given orally, both to aid in reducing hemoconcentration and supplying body needs.[1,58,59,62,75] The secondary anemia so frequently seen following severe burns, does not occur with this therapy.

In estimating the amount of blood to be given the patient there are no reliable standard guides available other than the fact that experimentally (and recently clinically), whole blood—2.5 to 5 per cent of the body weight has proven effective.[1,58,75] Somewhat larger proportions of orally administered electrolytes have been advocated. The chemical construction of these solutions is similar in nature to that of interstitial fluid and various combinations have proven satisfactory.* Reliance must be placed for the most part upon the clinical picture presented by the patient and sufficient blood is replaced to produce the desired effects.

A rough index is afforded by relating replacement volume to total surface area burned—such as the "first-aid rule" often recommended in plasma replacement: 500 c.c. of plasma is recommended for each 10 per cent of surface area burned—to be administered in divided doses within the first twenty-four hours. Blood being more effective than plasma, somewhat smaller replacements may be reasonably expected to produce the effects expected from larger volumes of plasma.

Such rules should be looked upon as rough guides and should not supersede sound clinical judgment.

The amount of Hartman's solution or other combinations of electrolyte is determined along similar general lines.

Lacking reliable laboratory criteria to guide intravenous replacements, the necessary replacements are best administered by the oral route as soon as the patient is able to drink. The intestinal mucosa can be depended upon to monitor the necessary electrolyte replacements more safely and accurately than can be done by any other known method.

* NaCl—$Na\ HCO_3$—8 to 15 per cent of body weight.[58] A solution containing the following has also been reported as effective; (liter)—6.10 gm. NaCl, 0.2 gm. $CaCl_2$, 0.2 gm. KCl, 0.07 gm. Sodium phosphate 0.05 gm. $MgCl_2$, 2.58 gm. $NaHCO_3$, 2.09 gm. Dextrose in 1 liter distilled water.[1]

Various measurable factors of "blood chemistry" notoriously fail to mirror accurately the abnormalities which have taken place in the interstitial fluid compartment.

In general, the negative load of interstitial fluid (which one wishes to replace) is directly proportional to the edema produced by the burn.

For oral use one may give half-strength Hartman's solution. (Isotonic Hartman's is relatively "hypertonic" in relation to intestinal mucosa and electrolyte exchange is less effective than with the more dilute mixture.) A very satisfactory mixture may be prepared by dissolving 3 grams of sodium chloride and 1.5 grams of sodium bicarbonate in 1 liter of water.[18] This "cocktail" may be chilled to increase palatability. It has been shown that there is less frequent vomiting of this mixture if it contains $NaHCO_3$ rather than NaCl alone.[77,78]

Water must be made available to the kidneys in sufficient quantities to maintain a urinary output above 1 liter/diem[16,46] This may be supplied either as 5 per cent glucose in water or as drinking water. Great care must be exercised in this respect.[69,75,86]

During the acute period of shock—for an adult with burns involving, say, approximately 20 per cent of his surface area—one might then begin with an intravenous administration of 1000 to 1500 c.c. of whole blood; 1000 c.c. Hartman's solution and 1000 c.c. 5 per cent glucose in water during the first twenty-four hours. The oral administration of electrolyte solutions is preferable if the patient is conscious and able to drink. Subsequent administrations or even prompt modification of the initial therapy depends upon clinical response.

Emphasis is placed upon treating the patient as a whole and placing reliance upon clinical response rather than fulfillment of standard rules. Careful attention is paid to sensorium, pulse volume and venous distention; frequent examinations of the lung fields are made.

One of the most important features most frequently overlooked in burn therapy is the fact that the numerous solutions which have been infused into the patient (for the control of shock, infection, restoration of plasma volume, et cetera) must ultimately be either metabolized and utilized by the patient, or excreted as "waste" products. During the period of resorption of edema (plus the products of cellular necrosis and locally applied medicaments) there must ensue a satisfactory period of excretion else the patient remains in a state of physico-chemical imbalance from which numerous and fatal complications may arise.[1,9,75] The possibility of the occurrence of "water intoxication" in the so-called toxemia stage of burns may merely represent the end result of fluids introduced earlier.[9,11,19,20,24,36,44,73]

III. The Local Treatment of the Burned Surface

(a) *General Principles of Wound Treatment.*—For several years after the introduction of Tannic Acid the problem of the local treatment of the burned surface was thought to have been solved.[48,66] Unfortunately this and many other locally used medicaments served merely to keep attention from being drawn to the all-important systemic disturbances occurring in severely burned patients. It is now well recognized that any attempt to become elaborate and use anything other than the simplest of coverings on an extensive burned surface will do more harm than good.[39]

There is no absolute need to separate local treatment from the treatment of shock, since they can be made to complement one another. Emphasis on the priority of shock treatment or its prevention is laudable only when the local treatment is such that it is likely to aggravate or precipitate shock. In general, debridement and cleansing with their implication of morphine and/or anesthesia constitute factors conducive to production of shock in severely burned patients. Moreover, debridement may lead to further contamination.[12]

In dealing with fresh burns, the immediate application (under asceptic technique) of a sterile, vaseline, occlusive pressure dressing has much to recommend it. This is so, because, a burn by the very nature of the injury is usually self sterilizing. Infection is usually the result of contamination of the burn wound *after* the burn is received.[20] The usual source of this contamination is the mouth and respiratory tract of the patient or attendants.

In an *adequately* treated *fresh* burn, infection plays no role. When it occurs, there is a proportionate rise in morbidity, mortality, and complications. Scar formation is further enhanced. The prevention of infection, therefore, is a prerequisite to good therapy.[9,44,52,54,25]

(b) *Technique to be Employed.*—(1) Standard aseptic operating room technique is employed. Working in teams hastens the procedure.

(2) With the patient already having been af-

forded some protection by the application of sterile towels or sheets, and parenteral fluids having been started:

(a) Plain vaseline fine-mesh (44 mesh) gauze strips are applied in a one-layer thickness over the entire area. The vaseline plays no specific role other than preventing adherence of dressings.

Place the strips in the longitudinal axis of the extremities. Avoid encircling of parts with resultant constriction if edema develops.[3]

(b) Overlay the vaseline gauze strips with several layers of "flats." The fingers and toes should be kept slightly separated.

(c) Follow with a generous application of sterile mechanics waste, cellulocotton or "fluffs."

(d) Provide compression by means of an elastic ("Ace") bandage, or 5-yard roll, stockinette, or skin-tight plaster as advocated in some clinics.[36,47] This dressing should provide an evenly distributed compression, but avoid restriction of circulation.

In applying the dressing to an extremity, care must be exercised that the dressing extends to the most distal parts to avoid a "tourniquet" effect and consequent edema of the extremity distal to the dressing.

(e) Splints, (which can be made of folded newspapers) may be incorporated in the dressings for further immobilization and comfort.

Elevation of the affected parts will further aid comfort, lessen edema, and minimize spread of infection.

(f) Once applied, this dressing is left strictly alone until the tenth to fourteenth day, unless the patient's systemic reaction raises the possibility of serious infection. If such is the case, the dressing is inspected in the areas of tenderness.

The importance of restricting the frequency of dressings has been adequately confirmed. There is a direct relationship between the rate of healing and the number of times dressings are removed. There is also a factor of increased contamination which is cumulative with each dressing change.[24]

(c) *Chemotherapy.*[73]—If the patient is seen early and a sterile dressing applied promptly, chemotherapy is unnecessary in any form.

Local application of drugs, such as the sulfonamides, not only creates the possibility for the absorption of toxic amounts of the drug, but in addition, may unnecessarily delay healing.

Most chemotherapeutic agents are likely to destroy remaining islands of viable epithelium.[20] The sulfonamides, in addition, may aggravate or initiate renal damage—the urinary output of fluids in these patients being minimal.[4,14,17,34]

When contamination has been great enough, or treatment delayed long enough to make the likelihood of infection quite certain, or when infection is already present, chemotherapy is, of course, helpful.[52] Even so, one need not depend on topical application, since orally or intravenously administered sulfonamides are rapidly made available to the burned surface. This is demonstrated by the high levels of the drug found in bleb fluid and exudate.

Locally, saline dressings will facilitate drainage,[9] or saline baths may be used. When these are not feasible, vaseline dressings and mechanics waste will permite drainage of the exudate.[54]

(d) *The Question of Debridement and Cleansing.*—Extensive debridement and cleansing materially shortens the survival time of experimental animals.[41,73]

It has been definitely proven that debridement and cleansing are *not essential* to good burn treatment.[73]

While the above principles generally apply, contamination is occasionally so overwhelming, that the progress of infection may be minimized by some form of cleansing. In some instances, gentle irrigation with saline alone may do much to convert a grossly contaminated wound into a clean wound. Others may require gentle cleansing with a neutral soap on moist cotton pledgets. In any case, the blisters are not opened since it has been demonstrated repeatedly that bleb fluid remains relatively sterile for several days *Furthermore, there is no better dressing known for burns than skin itself!*

The point to be emphasized is, that one merely hopes to convert a grossly contaminated wound into a relatively clean one, and not to sterilize the surface. Borderline cases will always exist where only sound surgical judgment can be relied upon to decide what is helpful and what is meddlesome.

All contaminated or infected wounds should be cultured.

(e) *Tetanus and Gas Gangrene Prophylaxis.*—Tetanus antitoxin is generally indicated in most major burns.

For military personnel, a "booster" dose of the toxoid is all that is required.[81]

Civilians should receive a prophylactic dose of T.A.T. following skin testing for serum sensitivity.

When serious pulmonary lesions exist, caution must be exercised in administering any form of serum therapy, and may occasionally be wisely omitted, to avoid the risk of bronchospasm.[73]

Prophylaxis against gas gangrene is less clearly defined. When indicated, only reliable polyvalent preparations should be used. Even the use of these is open to serious question as there is considerable doubt as to any value obtained.

(f) *Management of Burns of the Eye.*[79]—Burns of the outer lids are handled exactly the same as those involving the rest of the face. Windows must be provided, if an occlusive dressing is used on the face, to permit daily inspection of the eyes.

Local treatment of conjunctival burns consists of instillation of an ophthalmic ointment containing 2 per cent butyn sulfate and metaphen (1-3000).

Cocaine should not be instilled into burned eyes, as it produces corneal edema.

If both the lid, conjunctiva, and eyeball have been burned, the raw surfaces must be kept from uniting by passing a smooth glass probe between them daily, to break up any adhesive bands tending to form, until the surfaces have healed separately.

Severe cases will require grafting. Neglect will lead to symblepharon formation.

Another complication that must be watched for is *iritis,* which not infrequently complicates eye burns. (Treatment consists of instillation of atropine, application of heat, and foreign protein therapy.)

An ophthalmologist should be consulted in all doubtful cases.

(g) *Management of Genitorectal Burns.*—The anatomical structure of this region, and the nature of the secretions encountered, necessitate frequent tubbings or saline dressings in this area. When tubbing is feasible, a physiological concentration of fluid may be prepared by the addition of 2 pounds of ordinary table salt to a tub of water. Another method in vogue is to use 1 gallon of a saturated solution of NaCl to 32 gallons of water. The temperature must be carefully controlled and maintained at a level of 100-105° F.

When the patient is necessarily confined to bed, physiological saline dressings and frequent irrigations are used. Occasionally, slightly hypertonic saline is useful.

Between tubbings or irrigations, the patient may be placed on large absorbent pads covered with several layers of vaseline gauze. These are changed as frequently as is deemed necessary.

Careful cleansing after each bowel movement is important. In children, it is occasionally advisable to prevent bowel movements for the first four to five days by the administration of paregoric.

(h) *The Managements of Burns Complicated by Fractures.*—When a patient who is burned, simultaneously sustains a fracture, the treatment of both conditions is frequently made more difficult. Such patients may be classified into three groups:[81]

(1) The burn and the fracture are in the same location.

(2) The burn and the fracture are in separate locations.

(3) A compound fracture is present in the same area as the burn or in a separate area.

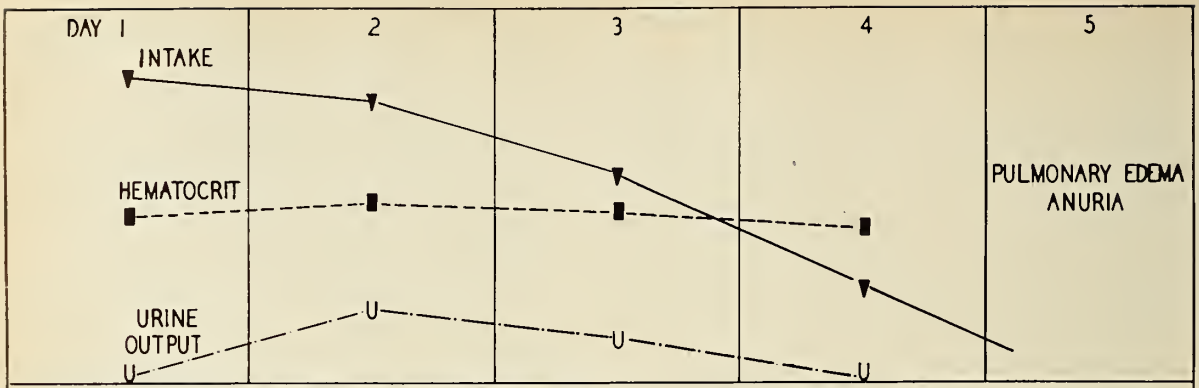
In most cases, the local treatment of the burn and the fracture can be carried out simultaneously just as though one or the other were not present. Sterile dressings are applied in the usual manner prior to moving the patient—similar simple dressings being applied over any compounded area.

In the first group (burn and fracture are in the same location) plaster encasement has proved satisfactory in the reported cases. This type of encasement, just as in dressings of burned patients, is changed every second week until the burn is healed or deemed satisfactory for grafting.

In the second group, (burn and fracture in separate locations), the fracture is treated just as if no burn were present elsewhere and the burn is treated in the usual fashion. Only the simplest methods of fixation should be used, inasmuch as grafting procedures which may be carried out later necessitate available donor sites which should be unencumbered with plaster.

In the third group, (burns plus compound fracture), treatment is carried out as outlined for Group I, i.e., plaster encasement after suitable debridement and reduction of the compound fracture. It has also been found that pins for skeletal traction may be passed through burned areas following careful local debridement and cleansing without incurring too great a risk.

Fractures in special locations will, of course, need special attention (hanging cast over a pressure dressing in fractures of the humerus associ-



EXTENSIVE BURNS LOCAL SULFADIAZENE SPRAY 50 % SURFACE AREA

R.B.C.	HB	HT.	N.P.N.	C.L.	CO2	PLAS. PROT.	GLUCOSE 5%	GLUCOSE 10%	SALT	ORAL	I.V.	OUT	EMESIS	DAY	REMARKS	PLASMA
6.42	130	46.5				6.25	5500			1500	8100	0	90+	1		1100
		49.0	74	483	48	5.17	1900	2000	3000	1000	7900	200+	225	2	DARK URINE (R.B.C.)	800
	90	47.0	109	465		4.72		4600		800	5775	125	750	3	CONVULSIONS	375
		420	120	421		4.58		1700		500	2650	0	300	4	EDEMA-CONFUSED	450
DEATH--PULMONARY EDEMA AND ANURIA														5		

URINE ++ALB---DISINTEGRATED R.B.C.---GRAN CASTS
BLOOD PRESSURE AND HEMATOCRIT MAINTAINED

DECEMBER 1941

Fig. 1. A case of extensive burns (50 per cent) treated with plasma and sulfadiazene spray (1941). Despite adequate administration of fluids, the fulminating oliguria progressed and the patient died in anuria with pulmonary edema despite the maintenance of blood pressure and hematocrit at the normal levels. The deposition of crystals in the renal tubules in the presence of an oliguria probably occurred. Contrast this case with that depicted in Figure 2.

TABLE II. MINIMUM AMOUNT OF WATER NEEDED TO EXCRETE 35 GRAMS OF DAILY WASTE MATERIALS*

Maximum Concentrating Ability of Kidney. (Specific Gravity)	Minimum Water (Urine) Needed c. cm.
1.032 - 1.029	483
1.028 - 1.025	595
1.024 - 1.020	605
1.019 - 1.015	850
1.014 - 1.010	1439

*Data from Lashmet and Newburgh[46]—quoted by Coller and Maddock.[16]

ated with burns; skeletal traction in fractures of the femur, et cetera).

IV. The General Care of the Burned Patient

Every effort must be directed toward the prevention of development of any factor promoting chronicity of the reparative processes. Malnutrition is one of these factors.

(a) *The Nutritional Status.*[23,35,42,61,74]—The nutritional status of the patient must be zealously maintained, remembering, of course, that food offered to the patient is of no value unless it is eaten. *The protein intake in severely burned patients should never be less than 100 to 125 grams daily.* Even on this intake, a negative nitrogen balance may develop.[76]*

Clinical and experimental evidence has demonstrated that in burns, as much as 45 grams of nitrogen may be excreted in twenty-four hours, equivalent to the catabolism of 280 grams of protein, or in quantity, to eight transfusions of 500 c.c. lots of plasma.[49,74]

Large quantities of protein, therefore, are indicated in the diet, and must, of necessity, frequently be supplemented with commercial Amino Acids preparations and blood transfusions.

An adequate *carbohydrate intake* is also important, not only from the standpoint of calories, but also for the protein sparing effect and avoidance of ketosis. If carbohydrate is not given in adequate quantities, protein will be broken down to provide carbohydrate for the body. Given adequate carbohydrate and protein, a well-nourished patient will obtain any deficit in calories from his own fat depots. If the patient is undernourished

* Nitrogen balance occurs when the nitrogen of the diet equals the nitrogen of the urine plus the small loss in the feces.

D.L.- AGE 22 MO. BURN 50% BODY SURFACE - 1°-2°-3°- ENTIRE LEGS, THIGHS, BUTTOCKS, LOWER ABDOMEN, AND BACK. MINOR DEBRIDEMENT AND DRESSING WITH COD LIVER OIL UNG. AND PRESSURE BANDAGE (ELSEWHERE) 6 HOURS PRIOR TO ADMISSION. DRESSINGS UNCHANGED FOR 10 DAYS SHOCK PRESENT INITIALLY. UNEVENTFUL RECOVERY

DATE	HEMOGLOB.	HEMATOCT	PLASMA PROTEINS	BLOOD	SALINE	NACL NAHCO3 ORAL	5% GLUCOSE	WATER ORAL	INTAKE
6/28-6/29 6PM.-7AM.	—	—	—	250	200	500	500	—	1450
6/29-6/30 7AM.-7AM.	17.8	60.4	4.6	350	250	1400	300	—	2300
6/30-7/1 7AM-7AM	18.5	60.5	4.59	200	500	—	1350	575	2625
7/1-7/2 7AM.-7AM.	18.5	58.6	4.93	100	200	—	1040	675	2015
7/2-7/3	—	—	—	150	200	—	1750	765	2865
8/2	14.6	45.5	7.3	—	—	—	—	—	—

Fig. 2. A case of extensive burns (50 per cent) treated immediately with whole blood transfusions and compression dressings. The patient underwent an uneventful recovery, did not develop an anemia and maintained an excellent urinary output (1945).

or chronically ill, fat stores are no longer available and the matter of caloric intake becomes one of utmost importance.

The ideal method of feeding the patient is, of course, by the oral route. Supplementary feedings will be found to be almost a necessity in most cases.

Vitamin supplements are helpful, particularly A, C, D, and the B complex. Brewer's yeast (15 grams t.i.d.) is an effective and relatively cheap source for the B complex if the patient can tolerate it.

Iron supplements are necessary in the rebuilding of the hemoglobin molecule, anemia being an aftermath of all severe burns. If protein is needed both for the rebuilding of tissue and plasma proteins, and also for hemoglobin, the protein flow favors reconstruction of hemoglobin first.[84]

It is advisable to weigh the patient on admission and at frequent intervals, the weight being used as one index of the nutritional state.

(b) *The Renal Status.*—A careful record must be kept of the daily intake and output of the patient. The output, if at all possible, should be maintained at 1 to 2 liters daily.

Prolonged lowering of blood pressure, anoxia, and precipitation of abnormal crystals (hemoglobin and sulfa drugs), are likely to precipitate serious renal damage (functional and organic) which may be the deciding factor in the outcome of the patient.[34]

It must be remembered that electrolytes exert a significant influence on renal output.[17,18] (Fig. 1 and Table II).

If the amount of waste products to be excreted increases, a proportionate increase in urine water must be available to hold these waste products in solution. If primary renal disease is present, concentrating ability is impaired and larger quantities of water must be made available. Hartman's solution, or the "cocktail" referred to previously, tend to improve renal output. Under ordinary circumstances, 5 per cent glucose in water will supply sufficient "available" fluids to promote urinary flow.

Daily urinalysis, with particular attention to specific gravity, reaction, and microscopic examination of the sediment, are useful in controlling this phase of the treatment.

Hemoglobinemia and *hemoglobinuria* occur frequently in the early phases of severe burns.[10,40,72,73] The precipitation of hemoglobin crystals in the renal tubules under these circumstances is, therefore, not entirely unexpected. This is particularly true if a condition of acidosis is present.[4] Observation of the total urinary output and sediment

may lead one to suspect this difficulty and introduce appropriate therapy.

Many burned patients pass into a state of severe oliguria or anuria from which they may not recover.[34] (Fig. 1). The exact mechanisms at fault are not too clearly understood at present.

(c) *Liver Function.*—In patients with severe burns, who are treated with applications of tanic acid locally, the incidence of liver damage will be very high and correspondingly serious.[28,85]

Anoxia likewise is capable of producing liver damage, particularly in those cases in which severe hypotension or shock has been present for a prolonged period of time.[40]

It is well established that a high carbohydrate, high protein intake offers an excellent protective influence in liver function.[61]

Factors of the vitamin B complex, particularly thiamin, are required for normal carbohydrate metabolism. The liver plays an important role in this metabolism. Since the B complex is rapidly dissipated (and probably liver stored), supplements of vitamin B complex may prove helpful in the over-all general care of the patient.

(d) *Gastro-intestinal Damage.*—

(1) *Ulceration and Hemorrhage.*—It has been estimated that 3.3 to 3.8 per cent of patients dying from severe burns demonstrate the presence of a Curling's ulcer of the stomach or duodenum.[22,38] The incidence is highest in the younger age groups (0 to 10) although this may be due to the fact that a larger number of children are burned in contrast to adults.

Occassionally these ulcers may go on to perforation.

Intestinal ulceration and bleeding are not infrequently encountered in extensively burned patients, and may contribute significantly to the development of shock and anemia.[34]

An elevated N.P.N. may be associated with massive intestinal bleeding, and may be the clue of its presence if renal function is satisfactory.[13,71]

Repeated stool examinations for blood should, therefore, be done on all seriously burned patients.

(2) *Vomiting.*—This may be due to a delayed emptying of the stomach which is frequently associated with an inadequate or lowered total blood volume. If this is so, it should be relieved by adequate whole blood replacement.

The composition and quantity of the electrolyte fluids being replaced may be at fault. Underhill has reported frequent relief of vomiting in patients receiving isotonic saline, following the administration of 5 to 10 grams of sodium bicarbonate by mouth.[77,78]

Rapid administration of fluids is occasionally responsible for vomiting, particularly when given by continuous drip through a Levine tube.

Occasionally, morphine alone is responsible, suggesting an alteration in dosage, or a change to some other drug.

(e) *Summary of Frequently Used Laboratory Data.*—At some time in the course of treatment of a severe burn, practically all of the following laboratory examinations will be found desirable if a careful study is being made of the case. Practically all of the determinations based on an examination of blood can be seriously misleading, unless the clinician is acutely aware of the readjustments. which have taken place in total blood volume and the other fluid compartments of the body following the burn. Repeated examinations will, therefore, be of much more value than a single determination.

1. RBC
2. WBC
3. Hematocrit
4. Hemoglobin
5. Total serum proteins (Fractionation)
6. Plasma chlorides
7. CO_2 combining power
8. NPN
9. Prothrombin time
10. Bilirubin
11. Sulfonamide levels
12. Urinalysis with micro examination repeated
13. Bacteriologic studies
14. Stool examinations
15. Chest x-ray
16. Nitrogen balance studies
17. Vital capacity
18. CO content of blood
19. Liver function studies
20. Plasma hemoglobin

It is practically impossible to state the prognosis of a severe burn from any single laboratory examination. In general, repeated hematocrit, plasma proteins, N.P.N. and CO_2 determinations are the most helpful in supplementing clinical judgment.

(f) *Emotional Aspect of General Care.*—Extensively burned patients very frequently present problems in emotional adjustment involving such factors as disfigurement, disability, and economic loss. Occasionally, well-developed psychoses may appear and require careful treatment by a competent psychiatrist.[15]

The physician must also be aware of the production of permanent nerve cell damage to the basal ganglia and cortex as a result of severe

anoxia.[7,80] Such changes lead to the development of athetoid chorea, aphasias, et cetera. The sudden death seen in certain patients undergoing treatment for extensive burns has been attributed to this factor.

carried out at the earliest optimal moment. If skin is replaced satisfactorily, surface losses, infection, anemia and other difficulties disappear from the clinical picture.

Under the treatment outlined previously, re-

TABLE III. IMMEDIATE AND DELAYED NEEDS FOR BLOOD IN BURNS

1-LOCAL HEMORRHAGE--'PERITHERMAL'--IMMEDIATE LOSS.		
2-HEMOLYSIS OF RED BLOOD CELLS.		
A-HEMOGLOBINEMIA B-HEMOGLOBINURIA	IMMEDIATE LOSS.	
C-8-10% POTENTIALLY HEMOLYZED CELLS IN ADDITION TO ABOVE. TOTAL LYSIS 9.5-10% OF TOTAL RED BLOOD CELLS.		
3-VASODILATATION.		
A-INTRAVASCULAR LOSS. B-CONTRIBUTORY TO(1).	IMMEDIATE LOSS.	
4-STASIS AND THROMBOSIS.		
A-DIRECTLY AS RESULT OF BURN. B-INDIRECTLY AS RESULT OF SHOCK.	IMMEDIATE LOSS.	
5-LOSSES FROM GRANULATING BURN WOUND.		
A-INCREASED VASCULAR BED---INTERNAL LOSS. B-BLEEDING FROM GRANULATIONS---EXTERNAL LOSS		DELAYED LOSS.
6-BLEEDING FROM BURN COMPLICATIONS.		
A-GASTRO-INTESTINAL ULCERATIONS.		DELAYED LOSS
7-PROTEIN DEPLETION.		
A-DECREASED HEMOPOIESIS.---ANEMIA.		DELAYED LOSS
8-GRAFTING PROCEDURES. 9-CORRECTION OF DEFORMITIES. 10-SEPSIS A-CONTRIBUTORY TO (5).	EXTERNAL BLEEDING	DELAYED LOSS

Hemoconcentration does not contraindicate the transfusion of whole blood in the severely burned patient.[1,2,31,58,59,62,63] See Section II(g).

Experience has demonstrated that *Occupational Therapy* is very beneficial to burn patients both from a mental and physical standpoint. It is a factor in the emotional care of the patient which must not be disregarded, especially in chronic cases.

V. The Principles of Skin Grafting

(a) *Local Medicaments and Chemical Debridement.*—The claimants for various preparations alleged to insure complete healing without scarring apparently fail to appreciate the mechanism of healing.[11] There is no preparation known that will "grow" normal skin or cause cellular repair to proceed any faster than normally obtained under optimal nutritional conditions and in the absence of infection or toxic topical agents.[11,24]

Skin grafting of these areas is, therefore, to be

generation of areas of *partial loss* should be complete within a two-week period unless complicated by infection. In any event, at the time of the first change of dressing, (usually tenth to fourteenth day) it is possible to make an appraisal of the areas requiring grafting.

To facilitate the separation of slough, bloodless piecemeal excision of the edges may be employed. The time required for the complete separation of the slough is, of course, quite variable, and may take from two to four weeks for the completion. During this period, saline dressings may be used to prepare the "soil" for grafting.[9] (Pyruvic acid dressings, maintained at the proper pH and thickness, have been advocated by several clinics.)[33] The parts ready for grafting may be covered with skin while the surgeon is waiting upon separation

of slough elsewhere. One should bear in mind that it is practically impossible to keep an area of slough sterile.[73]

If grafting is delayed for any reason, or treatment prolonged, exuberant granulations are likely to occur in the wound. These in turn lead to heavy subgraft scarring, interference with blood supply and a consequent reduction in the percentage of "takes." It is much better to excise exuberant granulations before proceeding with grafting, paring them down to a firm base. Skin grafts are also likely to fail in the extensively burned patient if the hemoglobin level is allowed to drop below 80 per cent.

Penicillin, administered for a period of fourty eight to seventy two hours before grafting and for several days afterwards, may decrease the incidence of infection and improve the percentage of "takes."

(b) *Autogenous and Homologous Grafts.*— When a patient is severely burned, a full- thickness loss of skin may occur, (a) as a direct result of the burn, or (b) secondary conversion from partial to full-thickness loss as a result of chemical agents utilized in the treatment of the local lesion or secondary infection.

Whatever the mechanism, the end result is an open, granulating wound. From such a surface, there is a constant loss of blood constituents, and secondary infection and septicemia remain a constant threat[19] (Table III).

Unless early grafting is carried out, these wounds either fail to heal or they must heal by contraction of adjacent tissues and the formation of "scar epithelium."

For the patient with extensive raw surfaces, who appears to be losing ground despite all the known supportive measures and, accordingly, remains unsuitable for operation, it may become necessary, as a life-saving procedure, to use *homografts*. Several donors may be recruited from the patient's family, each contributing a sheet of split-thickness skin. These may then be applied to the raw surfaces of the patient without anesthesia and retained in place with pressure dressings. Homografts thus applied may survive from three to ten weeks, affording the patient surcease from painful dressings, eliminating the debilitating loss of blood constituents from the uncovered surfaces, and permitting general improvement. Coincident with this improvement there will be a stabilization of the serum proteins and maintenance of a satisfactory level of hemoglobin. Piecemeal replacements with the patient's own skin may then be carried out.

The advantages of operating in teams upon burn patients to minimize blood loss and reduce the period of anesthesia is obvious.

The importance of early skin grafting can not be overemphasized.

VI. Contractures nd Deformities

Contractures and deformities are the end result of a long continued granulating surface, and will continue to develop as long as the surface remains unhealed, and will occur despite the use of splints, casts, or other forms of restraint.[19]

The complications of a granulating surface may be listed briefly as follows:[25,54]

(a) Contractures and deformities
(b) Infection and debilitation
(c) Poor subsequent healing and keloid formation
(d) Carcinoma

The prevention of contractures and deformities depends upon the avoidance of extensive scar formation. This in turn implies early skin grafting and avoidance of infection. The longer healing is delayed, the thicker the scar becomes and the greater the menace of a poor result. The late complication of carcinoma occurring in a burn scar, while rare, is said to never develop in a burn site which has healed rapidly.

The power of scar contracture is almost incredible, the most bizarre distortions to be witnessed in the entire field of surgery occur following severe burns. Once developed, most contractures and deformities require operative correction to restore or improve function. Such treatment should be carried out by surgeons experienced in the handling of such cases and whose knowledge of the type or types of grafts to be used will insure the best cosmetic result. The usual error in treating these cases, (i.e. burns with granulating wounds) is in waiting too long before grafting. Prolonged invalidism and disability represent added expenditure with lessened earning power.[9]

VII. Altered Physiologic Mechanisms Associated With Burns†

A physiological interpretation of the basis for the present treatment of severe burns. In (*A*), a

†See Figure 3.

theoretical balance obtains between the forces enhancing escape of fluid through the endothelial lining of the capillary (capillary hydrostatic pressure and tissue colloid osmotic pressure), and forces opposing the escape of this fluid (plasma static pressure, the part is elevated *(F-1)*, inasmuch as capillary hydrostatic pressure is inversely proportional to the height of the capillary above the heart. To increase the difference in colloid osmotic pressures, so that a greater force will op-

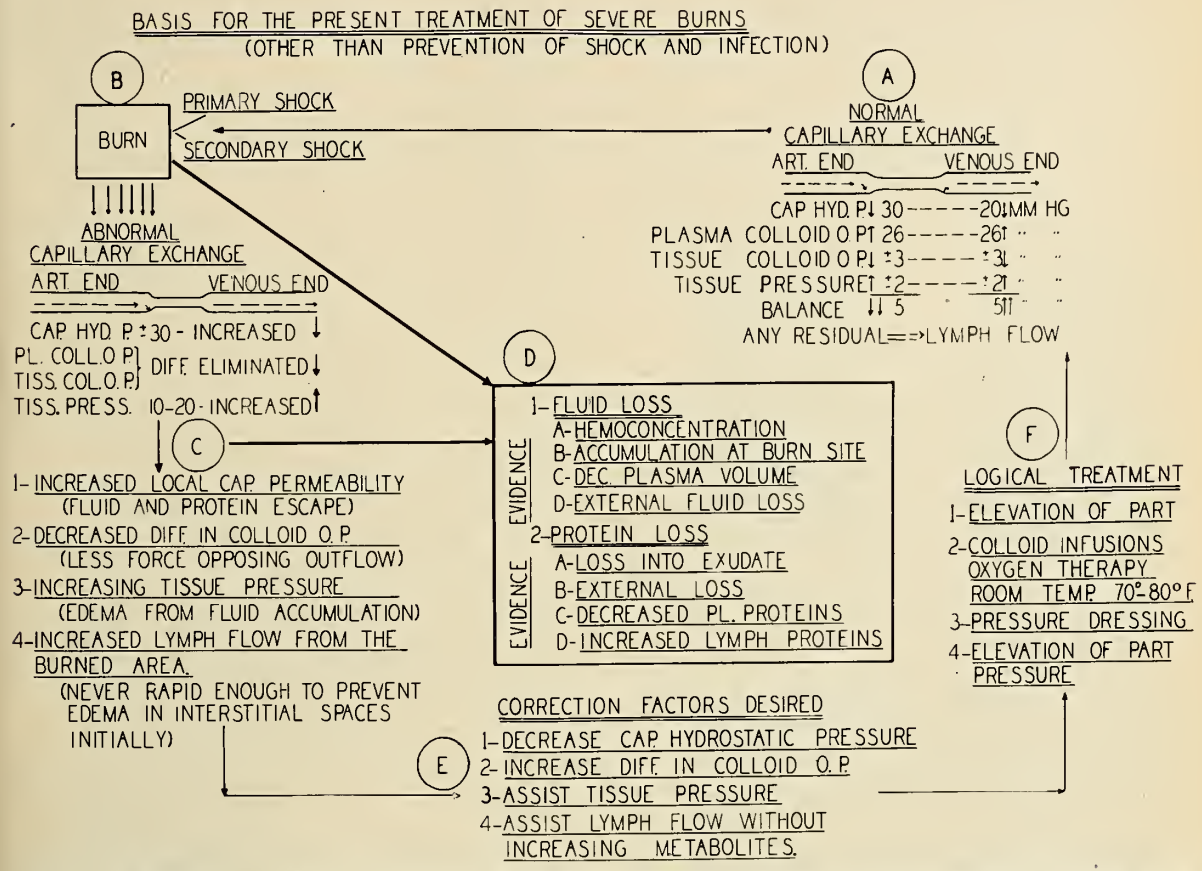


Fig. 3. See Section VII. A graphic representation of the altered physiological mechanisms occurring in association with burns—excluding shock and infection. The role of whole blood transfusions in the treatment recommended to restore these mechanisms to normal has been omitted for the sake of clarity.

colloid osmotic pressure and tissue pressure). The figures cited are approximate. Any temporary inbalance (muscular exercise, et cetera) would theoretically result in an increased lymph flow with re-establishment of balance. Following a severe burn, *(B)*, abnormal capillary exchange develops with the sequence of events as illustrated in *(C)*, and the resultant fluid and protein loss as cited in *(D)*. The evidence for such losses are given. The factors resultant from or associated with the sequence of events given under *(C)* which can be corrected clinically are listed under *(E)*. The establishment of these correction factors *(E)* gives rise to the "logical" present treatment of severe burns *(F)* other than the prevention of shock and infection. To decrease capillary hydrostatic pressure, the part is elevated *(F-1)*, inasmuch as capillary hydrostatic pressure is inversely proportional to the height of the capillary above the heart. To increase the difference in colloid osmotic pressures, so that a greater force will oppose escape of fluid, two forms of treatment are instituted *(F-2)*, i.e., more colloid is infused (plasma, Blood and oxygen is given to ameliorate any existing anoxia and thus allow capillary permeability to return to a more normal state. The temperature control likewise influences this latter mechanism. To assist tissue pressure and thus oppose outward flow, a pressure dressing is applied *(F-3)*. To assist lymph flow (and lessen edema of interstitial spaces) without increasing metabolites, the part is immobilized, elevated and a pressure dressing applied *(F-4)*.[45,68]

The role played by whole blood transfusions has been purposely omitted from the graph for clarity. They would, of course, be used under the section termed colloid infusions. Under *(D)*, red

blood cells should be included along with fluid and protein losses.

This brief outline of the present policies of treatment of the severely burned patient will undoubtedly undergo frequent revisions as time and experience dictate. Any attempt to include the multitude of theories and investigations concerning the various aspects outlined would have entailed a writing of such magnitude that publication in a single issue would have been impossible. By necessity, therefore, a large number of important publications on burns were purposely not quoted or included in the text. The bibliography was compiled with the purpose in mind of reflecting recent trends in therapy and their background.

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MSMS

1080, DEADLY TO RATS, FOUND HARMLESS TO FISH

1080, the new rat-killing chemical so poisonous to rodents that two ten-thousandths of an ounce will kill a full-grown rat, seems to be harmless to fish. Two zoologists, Joseph E. King of the U. S. Fish and Wildlife Service and Prof. William T. Penfound of Tulane University, tried out some solutions of 1080 on fingerling bream and bass, and found that the young fish could swim around indefinitely in water containing as much as 370 parts per million "with no apparent discomfort." (*Science*, April 19.)—*Science News Letter*, May 11, 1946.

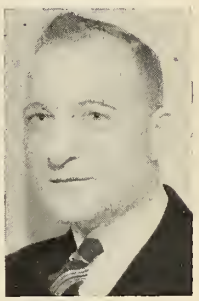
Polycythemia Vera

Variability of Presenting Symptoms; Economical and Symptomatically Satisfactory Treatment with Phenylhydrazine

By William J. O'Connell, M.D.
and
William E. Jahsman, M.D., F.A.C.P.
Detroit, Michigan



Wm. J. O'Connell



Wm. E. Jahsman

OUR INTEREST in polycythemia vera has been newly stimulated by the report of a case observed for seventeen years by Stealy and Sumerlin.[64] Though none of our patients were followed for so long a period, we do have a group with interesting variability of presenting symptoms, treated for the most part with phenylhydrazine. Except for one, all the cases have been observed from two to thirteen years and are reported in some detail later. The most recent case has been followed for fifteen months, and, at the patient's request, has been treated exclusively by venesection.

Definition

Osler[50] in 1903 reviewed nine reported cases "considered worthy since they represented in all probability a definite clinical entity, new to medical science." The earliest case, that described by Vasquez[74] in 1892, was included. Weakness, prostration, constipation, headache and vertigo were the chief symptoms and the main findings included chronic cyanosis, polycythemia and moderate enlargement of the spleen. Osler cautiously concluded that "future investigation will determine whether we have here in reality a new dis-

Dr. O'Connell is Assistant Physician and Dr. Jahsman, Associate in the Division of General Medicine, Henry Ford Hospital, Detroit, Michigan.

ease." With additional reports interest grew in the new condition, and in 1912 Lucas collected 179 cases, 149 of which seemed to meet the requirements of chronic cyanosis, polycythemia and splenomegaly. An interesting comment by Lucas is that "All methods of treatment were uniformly without benefit."

Little needs to be added to these early descriptions to meet the accepted modern definition of the disease. Though Haden[29] says that an increase in the number of erythrocytes is the only constant abnormality in the disease, we feel that Kracke[39] expresses our inclusive conception when he says, "polycythemia vera is a progressive and ultimately fatal disease of unknown etiology, characterized by an excessive number of red blood cells and usually the other formed elements of the blood, splenomegaly, increased blood volume, and symptoms resulting from these altered states." We would emphasize, particularly, that in our cases there was invariably an increased white cell count or the presence of immature cells.

Etiology

As stated above, the real cause of the disease is still unknown. It is natural to think of it as the reverse or the antithesis of pernicious anemia. Such a theory stimulated the use of gastric lavage in treatment to be mentioned later. In experimentally produced polycythemia in animals, using cobalt, Davis[13,14,15] was able to bring about depression of red blood cells by feeding raw liver or Ventriculin. He considered the possibility of a liver or stomach hormone, apart from and opposite to the antianemic principle, which depresses the hematopoietic activity of red bone marrow. That the disease is probably not related to gastric acidity was shown by Apperly and Cary[4] who found a rising incidence of achlorhydria with both increasing anemia and increasing erythrocytosis. Adamson and Storey[1], on the other hand, felt that the excessive amounts of histamine in the body of polycythemia patients, or unusual sensitivity to this drug, might be a factor in the etiology of polycythemia vera. Briggs and Oerting[6] suggested that erythemia was the result of excessive secretion by the stomach of a hormone with hematopoietic power which they called "addisin."

Nadler and Cohen[47] have described familial polycythemia, but there is some doubt whether all the criteria for diagnosis of the disease were met in these cases. Carpenter, Schwartz and Walker[9] reported two cases of polycythemia of possible neurogenic origin, since the blood picture returned to normal upon removal of a cerebellar hemangioblastoma. The authors do not define the cases as true polycythemia vera, mentioning specifically that neither had splenomegaly. Also, in fourteen other cases with similar cerebellar lesions, none had erythrocytosis.

Hence, just as in pernicious anemia, in which several body systems are involved—neurologic hematopoietic gastro-intestinal—there may be a group of etiological factors. Unfortunately, no such gratifying treatment as is present in liver for pernicious anemia has yet been found for polycythemia vera.

Symptoms

The majority of writers agree that the most common symptoms of polycythemia vera are those referred to the nervous system; such as headache, vertigo, neuroses, loss of consciousness and cerebrovascular hemorrhage or thrombosis. The above was found to be true in 127 (78 per cent) of the 163 cases reported upon by Tinney, Hall and Griffin.[71] Earlier writers who similarly emphasized these symptoms as predominant include Osler[50], Saundby and Russell[59], Hutchinson and Miller[37], Christian[10], and Brockbank.[7] Sloan[62] and Brown and Giffin[8] felt that some of these symptoms might be secondary to vascular changes or the slowed rate of flow of the blood because of its increased viscosity. Tinney, Hall and Giffin[70] found hematologic complications—hemorrhagic and leukmoid—in 110 of 163 cases. Oppenheimer[49] reported seven cases with vascular disturbances antedating by several years the generally appreciated symptoms of the disease. Yet, we need to avoid the confusion that may arise from cases such as one reported by Ragins and Coe[54], in which the polycythemia mentioned may have been the result rather than the cause of thrombosis of the vena cava. As stated by Rosenthal and Bassen[57], the disease is one of long duration, remarkable chiefly for its chronicity and unusual variation in course and terminal phases. Here we would like to emphasize the point that patients may be asymptomatic for a considerable period of time, or that the presenting symptom may be entirely different in each of several successive cases. In the twelve cases reported later, the chief complaints were listed as follows: Dizziness, giddiness or lightheadedness—two; headaches—two; loss of energy—two; spots

before the eyes—one; pain in one leg—one; pain in one hand—one; pain in the abdomen—one; nervousness—one; and "stroke"—one.

Criteria for Treatment

As mentioned above, we feel that simple increase in red blood cells and an enlarged spleen are not sufficient reason for a definite diagnosis of polycythemia vera, much less an indication for treatment. Surely there is a goodly number of average normal men and women with red cell counts and hemoglobin readings both above and below our standard 100 per cent who have no symptoms and require no treatment. An even larger number exists with compensatory and symptomatic erythrocytosis—not true polycythemia vera at all. Included in this group are patients with marked dehydration, those with conditions interfering with a normal oxygen supply, cases with hemoconcentration (as in shock), cases of methemoglobinemia from drugs, or people who have moved to higher altitudes. All these must be excluded, or, if suspected, observed regularly until other necessary requirements, such as increase in blood volume or other formed elements of the blood, or symptoms resulting from these abnormalities, develop for a definite diagnosis of polycythemia vera.

Types of Treatment

In discussing the uniformly discouraging results of treatment, Lucas[44] mentioned the following methods: Splenectomy, general, diet and hygiene, venesection, x-ray, faradization, oxygen, and various drugs. Several of these methods deserve further comment.

Removal of the spleen is no longer advocated unless one of the few real indications for such an operation is co-existent with polycythemia vera. Nor has oxygen proved useful. In experimental polycythemia, Davis[16] felt that drugs such as Carbamyl choline chloride given in treatment depressed the bone marrow by increasing the oxygen supply. However, Barach and McAlpine[5], who rather recently revived its use, found no significant alteration in red cell count, hemoglobin percentage or oxygen capacity after each of two patients breathed an atmosphere containing 50 per cent oxygen for a period of over two weeks.

Venesection is still used in treatment, exclusively by some, as an adjunct by others. Reznikoff[55] felt that this method of therapy had in its favor rapid amelioration of symptoms. Stephens and Kaltreider[66] reporting five cases, considered venesection as good as other methods used and felt that it produced very little bone marrow stimulation. We feel that it is a helpful adjunct in the treatment of some cases, but do not quite agree with Haden[30] when he says it is the most satisfactory method of treatment for polycythemia vera. Nor is it necessary to do large venesections as advocated by Haden. Rather recently Hines and Darnell[35] reported good results from weekly or biweekly small venesections of 200 to 250 c.c., a simple office procedure with just a syringe and needle. Instead of blood volume studies, these authors were guided by simple hemoglobin—red blood cell count—hematocrit determinations twice a month. We have had no experience with such a procedure, but it does seem commendable, especially from the standpoint of simplicity and economy.

Since inadequate diets do produce anemia, it would seem that a proper dietary regimen should be a rational means of treating polycythemia. But in the hands of most observers, results have not been gratifying because of the development of other deficiencies. Dameshek and Henstell[11,12] found that diets which maintained an iron deficiency state were a valuable adjunct in some cases that had hemorrhaged or had venesection first. Successful results in seventeen of nineteen cases treated with diets allowing only 0.7 grams of animal protein daily were obtained by Herzog and Kleiner.[33] Deeny[17] found that Vitamin "C" given in conjunction with sodium bicarbonate produced improvement in general health and a marked fall in the red cell count in two patients with polycythemia vera.

Reports of the use of x-ray and radium in the treatment of this disease are not extensive in any one year, but this method of therapy has been used ever since the condition was first described. Head[31] observed good results from a combination of radium and benzene in one case. A number of patients have been treated by irradiation of the entire body, or large areas of it—so-called "spray" irradiation." Ludin of Basel, a colleague of Gilbert[25], was the first to demonstrate the necessity of irradiating the bone marrow for success in the treatment of polycythemia by x-ray. Satisfactory results from this method were then reported by Pack and Craver[52], Heublein[34], Sgalitzer[60], Langer[40], Hunter[36], Sanderson[59] and Pierson and Smith[53]. In a recent series similarly treated by Robbins[56], good results were reported in sixteen of twenty cases, remissions of from six months to five years being ob-

tained. Local x-ray treatment, on the other hand, gives variable results. Andersen, Geill and Samuelsen[3], from treatment over the pylorus in one case, felt that this was more rational than irradiation of the bone marrow. However, Stenstrom, Hallock and Watson[65] obtained negative results in four cases treated over the pylorus and duodenum.

From these reports it would seem that spray irradiation, in competent hands, is a very satisfactory method of treatment, but since cost must frequently be considered, we feel, as does Haden[30], that x-ray should be used largely as an adjunct for the relief of symptoms from a much enlarged spleen, liver or both. According to Tinney, Hall and Giffin[69], this does not occur in many cases, though there is some enlargement in one or both of these organs in as high as 66 per cent. Since the intrinsic factor that stimulates erythrocytosis is increased in the gastric juice of patients suffering from polycythemia vera, as proved by Adamson and Storey[1], it is natural to consider gastric lavage a logical measure of therapy. However, few have found it satisfactory, not only because it is repulsive to most people, but also because to be successful, lavage must be practically continuous which would result in the removal of necessary digestive juices. We have used the procedure in only two cases, and not long enough to prove that it had real value.

A newer method of therapy that seems to hold real promise is the use of radioactive phosphorus. The details of preparation, action, et cetera, need not be discussed here, since these are ably described by Tuttle, Scott and Lawrence[41,42,73] and Erf.[19] Among blood conditions treated by Lawrence over a period of four months were two cases of polycythemia vera, both of which had good results clinically and in the blood picture. Fitzhugh and Hodes[23] treated eight cases; four were markedly improved, one only slightly improved, one improved, and two had just started treatment. Erf and Lawrence[21] maintained six patients with polycythemia vera in essentially complete clinical and hematological remissions for nearly two years after treatment with radioactive phosphorus. Four required no additional treatment after the first course; one had only one further intravenous injection; and the sixth case needed two further courses of three injections each. Eleven additional cases with similarly good results were reported a little later by Erf and Jones.[20] These authors felt that radioactive phosphorus was probably the most conveniently administered and most satisfactory therapeutic agent known at that time for the treatment of polycythemia vera. Several other treatments having proved ineffective, Nagel[48] was very enthusiastic about the results of this newer method in his own son. The treatment resulted in a rather undesirable fall of the red cells to 2,800,000 per cu. mm. and was given too recently to judge the length of remission. From results of treatment in eighteen cases, Hempelman, et al.[32], felt that radioactive phosphorus was at least as effective as other forms of radiation therapy and might prove to be better. At the same time there were hematologic complications in that anemia, leukopenia and thrombocytopenia often developed weeks or several months after the last injection of radioactive phosphorus. We have had no experience with this newer preparation, but from the reports it does seem to hold promise. Objections at the present time are lack of availability and possible prohibitive cost.

Many drugs have been used in the treatment of polycythemia vera, including arsenic, benzene, salicylates, nitrites, bromides, lead, and phenylhydrazine or derivatives thereof. Only a few of these have proved effective. Forkner, Scott[24] and Wu reported good results in six cases treated orally with a solution of potassium arsenite, and felt that this constituted a safe and reliable method for palliative treatment. Sharp, Vonderheide and McKean[61] showed the beneficial effect of normal prophyl disulphide in one case. Falconer[22] used lead compounds in nine cases with satisfactory results. Most workers, however, hesitate to use preparations as dangerous as lead and benzene, and resort to what seems still to be the drug of choice; namely, phenylhydrazine or acetylphenylhydrazine. As early as 1908, Morawitz and Pratt[46] used this drug to produce anemia experimentally in animals. It was 10 years later that Eppinger and Kloss[18] first used it successfully in a patient with polycythemia vera. Reports of good results following this beginning include those by Owen[51], Long[43], Altnow and Carey[2], Giffin[26], Stealy[63], Giffin and Allen[27], Stone, Harris and Bodansky[67], McAlpin and Edsall[45], and Stealy and Sumerlin.[64] Haden[30], preferring venesection, still uses the drug in some cases. In our experience it has proved very satisfactory insofar as any treatment can be in this disease. As will be shown in the case reports, most patients were treated with the drug alone or in combination with venesection. Though there have been reports of untoward effects from the drug by Kennedy[38], Giffin[26], and Giffin and Conner[28] (one

case each), probably due to individual sensitivity, we have had no undesirable complications thus far. By watching the blood count carefully in the early stages of treatment, which is important because patients vary greatly in tolerance to the drug, complications can be avoided.

From two cases treated, Stone, Harris and Bodansky[67] felt that acetylphenylhydrazine was superior to phenylhydrazine in that the former is less toxic, dosage is more easily regulated, and there is a greater margin of safety. We have used phenylhydrazine much more than the acetyl derivative because, though more toxic, it is also more effective. The usual course at the beginning of therapy is 1/10 gm. daily for ten days, stopping the daily dose any time before this if the blood count warrants, or continuing longer than the ten-day period if necessary to obtain the desired result. It has been our experience that often relief from symptoms is a better criterion for the amount of medication than the blood count, since the latter continues to fall for a time even after discontinuing the drug. Probably the ideal level of the blood is a little above the 100 per cent mark. Once this level has been reached it is usually not difficult to establish the maintenance requirement in an individual case, as stated by Stealy and Sumerlin.[64] In this stage, too, patients often guide us in dosage even better than blood count alone.

Comparative Cost of Methods of Treatment

Of the satisfactory methods of treatment described, phenylhydrazine is doubtless the most economical, especially once a maintenance dose is established. The drug costs the patient about $3.00 a year, a blood count once in two or three months being the only other expenditure. Venesection, by any method, does require some expensive equipment. There may also be the additional cost of a brief period of hospitalization. The various methods of roentgen therapy are still expensive by comparison with drug treatment. Radioactive phosphorus, so far as we are able to learn, costs, if available at all, about $6.00 or $7.00 a millicurie, and most patients treated receive 30 or more millicuries in a year. Possbly after the war this new preparation will compare more favorably with phenylhydrazine from the standpoint of cost.

Report of Cases

Case 1.—S. C., white, female, aged forty-nine, was first seen November 3, 1931, because of a "dizzy-giddy" feeling, tingling of arms and legs and spots before the eyes. Physical examination revealed a ruddy complexion, blood pressure of 158/106, frequent extrasystoles and the spleen palpable one f.b. below the left costal margin. Hgb. was 21.8 gms. (normal = 15.6 gms.), R.B.C. 8,130,000, W.B.C. 12,050 with a normal differential count.

During a six-day hospitalization period venesections of 900 c.c., 600 c.c. and 500 c.c., respectively, were done. At discharge 1/10 gm. of phenylhydrazine hydrochloride was prescribed daily for ten days to be followed by 1/10 gm. every other day.

In January and May, 1932, venesections of 750 c.c. and 500 c.c., respectively, were performed, as dizziness still occurred occasionally. Hemoglobin determinations then averaged 17.6 gms., R.B.C. averaging 8,000,000. At this time the patient was still taking 1/10 gm. of drug every other day. In February and November, 1933, venesections of 800 c.c. each were done; on the former date phenylhydrazine was discontinued because of nausea; on the latter date Hgb. was 19.2 gms., R.B.C. 8,000,000 and the W.B.C. had risen to 22,500 with 3 per cent transitional cells noted in the blood smear.

Venesections of 700 c.c. each were done in January, 1935, and January, 1936. On the latter date Hgb. was 19.6 gms., R.B.C. 6,600,000 and W.B.C. 21,000, with 2 per cent transitional cells in the differential smear. From February, 1933, through January, 1936, 1/10 gm. phenylhydrazine was taken daily for thirty-day periods, averaging three such periods per year. Meanwhile the patient had lavaged her stomach on an average of once a week.

From the time of the patient's admission until June, 1936, the general health had been good, the only symptomatology being transient periods of lightheadedness occurring about eight to ten weeks following venesections.

In October, 1936, thromboses of the capillaries of the left second finger occurred, which ultimately resulted in amputation of the terminal phalanx. Similar thromboses in the following year eventuated in amputation of the terminal phalanges of the fourth and fifth fingers of the same hand. A 900 c.c. venesection was done with each amputation. In June, 1939, thrombophlebitis of the left lower leg occurred, together with an ulcerative lesion above the inner malleolus. This latter lesion was successfully managed with a Sooey boot. At this time the blood count showed a Hgb. of 13.1 gms., R.B.C. 4,810,000, W.B.C. 35,000; the blood smear showed a decrease in neutrophiles to 53 per cent, an increase in stab cells to 38 per cent, lymphocytes 4 per cent, transitional cells 3 per cent and myeloblasts 2 per cent. In December, 1939, her demise was reported at home and from the description of the attending physician, it was felt that cerebral thrombosis was causal.

Case 2.—H. S., white, male, aged forty-eight, was first seen February 1, 1933, for "indigestion," weakness and blurring of vision. Physical examination revealed a moderate obesity, ruddy facies, tortuous and engorged vessels of the eye grounds, liver edge palpable 1 f.b. below the right costal margin and a blood pressure of 110/80. Blood count showed a Hgb. of 22.0 gms., R.B.C. 7,-

590,000, W.B.C. 7,400, with a differential count of normal distribution, except for 2 per cent transitional cells. Venesection, with the removal of 750 c.c. of blood, was performed and the patient seen at monthly intervals until October 30, 1933, when the R.B.C. was 6,710,000 with a Hgb. content of 19.2 gms. Therapy during this interval consisted of daily stomach lavages by the patient, but he had experienced little improvement of symptoms.

Phenylhydrazine therapy was instituted, with a dosage of 1/10 gm. twice weekly, maintained until December 5, 1935. Venesections of 550 c.c., 750 c.c., 550 c.c. and 650 c.c. were also done during this interval. In this 26-month period numerous red blood counts still ranged about 7,000,000 with average Hgb. values of 19.0 gms. However, the patient had been practically symptom-free for more than two years.

Dosage of drug was increased to 1/10 gm. every other day and, although the patient remained on this schedule, he was not again seen until October 26, 1937, when the Hgb. level decreased to 13.4 gms. and the R.B.C. to 5,600,000. A three-day study period in the hospital was recommended, when physical examination revealed a large, soft, non-tender mass occupying the central portion of a now very protuberant abdomen. Gastro-intestinal x-rays showed marked displacement of the stomach and intestines, consistent with the presence of an abdominal cyst of probable pancreatic origin. The liver edge was now palpated 3 f.b. below the right costal margin. Phenylhydrazine was discontinued.

On February 6, 1939, the patient complained of low back pain. X-rays of the spine were negative, except for minimal hypertrophic changes. Repeat films were taken June 7, 1939, because of increasing low back pain, and revealed early changes of the fourth lumbar vertebra consistent with metastatic carcinoma. Blood values at this time showed a Hgb. of 14.3 gms., R.B.C. 6,040,000, W.B.C. 8,700, with a normal differential count.

The patient pursued a rapidly downhill course in the next three months, during which time he was followed at home. The last blood count on September 14, 1939, revealed a Hgb. of 12.8 gms., R.B.C. 5,840,000 and a W.B.C. of 12,100. X-rays of the same date showed increased destruction of the fourth lumbar vertebra and a metastatic lesion of the fourth rib anteriorly. A "cerebral accident" and death was reported to the hospital on September 25, 1939.

Case 3.—E. H., white, female, aged sixty, was first seen in the hospital, May 31, 1939, for lack of energy, failing memory and poor vision. Physical examination was not remarkable. Hemoglobin was 18.4 gms., R.B.C. 8,660,000, W.B.C. 7,500 with a normal differential count. A 620 c.c. venesection was done June 12, 1939, when the Hgb. rose to 21.0 gms., and the R.B.C. to 7,290,000. One-tenth gm. phenylhydrazine was given daily for the first ten days of every month for the succeeding twenty-three months, during which interval Hgb. varied between 13.7 and 19.0 gms., R.B.C. between 4,620,000 and 6,450,000. Therapy was omitted for one month of this interval, when jaundice developed following arsenical therapy for Vincent's angina.

In June, 1941, the patient had a severe attack of acute pancreatitis, and cholecystitis. Cholecystectomy was performed when the infection subsided. During this episode the liver and spleen became palpable for the first time, the spleen being palpable 3 f.b. below the left costal margin. From this point on phenylhydrazine was discontinued, and in the succeeding twelve months Hgb. ranged from 14.9 to 18.7 gms., R.B.C. from 4,700,000 to 6,900,000. The patient had a hysterectomy July 1, 1942, and expired postoperatively with a paralytic ileus.

Case 4.—W. H., white, male, aged forty, was first seen in the hospital October 9, 1938, because of fatigue of several months' duration. When the fatigue was greatest precordial pain of effort was present. Physical examination revealed a moderate obesity, flushed facies, B.P. of 118/84 and a liver edge palpable 2 f.b. below the right costal margin. Blood values showed a Hgb. of 19.5 gms., R.B.C. 6,750,000, W.B.C. 8,700 with a normal differential count.

The patient was placed on 1/10 gm. of phenylhydrazine daily for ten days and then on 1/10 gm. daily for the first ten days of subsequent months. He remained on this schedule until September 17, 1942 (four years) at which time the Hgb. was 20.2 gms., R.B.C. 6,810,000, W.B.C. 10,200, with a normal differential count. During this period he noted symptomatic improvement in fatigue and a disappearance of precordial pain. On this latter date also he successfully passed the physical requirements for a military commission. He was advised to discontinue phenylhydrazine; it was further suggested that he donate blood periodically to the plasma bank of the Red Cross.

Case 5.—E. M., white, female, aged fifty-eight, was first seen April 17, 1940, for pain, swelling and redness of the left hand. She had known of having a large spleen for the past eighteen years. Physical examination revealed a blood pressure of 160/80, redness and swelling of the left thumb and index finger, liver edge palpable 2 f.b. below the right costal margin and the spleen enlarged down to the pelvic brim and beyond the mid-line. Blood count showed a Hgb. of 17.4 gms., R.B.C. 6,000,000, W.B.C. 23,250, with a differential count of 80 per cent neutrophiles, 9 per cent lymphocytes, 2 per cent basophils, 1 per cent eosinophils, 1 per cent transitional cells, 4 per cent juveniles, 2 per cent promyelocytes and 1 per cent myelocytes. The pain and swelling of the hand subsided within a few days and the patient felt well until January 24, 1941, when she was hospitalized because of moderately severe abdominal distress of a few days' duration.

Investigative studies did not particularly contribute to the picture, other than to record a negative gastro-intestinal series and a W.B.C. now reduced to 15,950. The patient was then followed in the O.P.D., manifesting only moderate abdominal distress until November 30, 1942, when she was readmitted because of pleurisy with effusion. The fluid withdrawn from the pleural cavity was negative for pathological cells. At this admission the Hgb. was 14.2 gms., R.B.C. 4,880,000, W.B.C. 15,150, with a differential count showing 91

per cent neutrophils, 4 per cent lymphocytes, 2 per cent eosinophils, 1 per cent monocytes, 1 per cent juveniles and 1 per cent myelocytes. The patient was discharged improved and has been followed monthly in the O.P.D. until February 2, 1945, the date of her last visit. In this latter interval of over two years the patient has considered herself in "generally good health." Within the same period of time physical signs have been unchanged, but the W.B.C. had been steadily increasing to 40,000 on the date of her last visit. No outstanding change occurred in the differential count and the Hgb. value averaged 15.8 gms., the R.B.C. 5,300,000.

Case 6.—M. M., a white Yugoslavian woman of fifty-one years, was first seen September 29, 1941, because of recurrent abdominal cramps of one year's duration. She had known of a mass in her abdomen for five or six years. She also complained of weakness and noted that her face had been ruddy throughout life. The spleen was enlarged halfway to the umbilicus; otherwise physical examination was not remarkable. Blood count showed a Hgb. of 20.5 gms., R.B.C. 9,510,000, W.B.C. 11,100, with a normal differential count. In a 16-day hospitalization period two venesections of 500 c.c. each were done and 1/10 gm. of phenylhydrazine was given daily. On discharge the Hgb. was 18.0 gms., R.B.C. 6,430,000 and W.B.C. 9,900.

No therapy was given during the next two months; the Hgb. varied between 11.8 and 13.5 gms., the R.B.C. between 4,060,000 and 4,850,000. One-tenth gm. of phenylhydrazine per week was then given for a two-month period. The Hgb. rose to 18.4 gms., the R.B.C. to 5,930,000 and dosage was increased to 1/10 gm. three times weekly for another two months.

Thrombophlebitis of the lower extremities developed in June, 1942, and a bilateral saphenous ligation was performed.

During the next nine months 1/10 gm. of drug was taken twice daily and on March 29, 1943, the Hgb. was 13.7 gms., R.B.C. 4,640,000. Dosage was reduced to 1/10 gm. weekly for six months followed by 1/10 gm. every other week for an additional three months. In the next twelve months dosage was reduced to 1/10 gm. every third week. On March 26, 1945, the date of her last visit, Hgb. was 20.3 gms., R.B.C. 6,240,000 and W.B.C. 14,700. Phenylhydrazine therapy was reinstituted on a basis of 1/10 gm. per week.

Except for the episode of thrombophlebitis in June, 1942, the patient has been practically symptom free during the three and one-half years' observation.

Case 7.—O. B., white, female, aged forty-nine, was first seen December 26, 1941. She had been suffering from lightheadedness and headaches for six months. Physical examination revealed a blood pressure of 150/94, florid complexion, spleen palpable 2 f.b. below the left costal margin and a moderate bluish discoloration of the skin of the lower extremities. Blood count showed a Hgb. of 20.2 gms., R.B.C. 8,320,000, W.B.C. 15,100, with 3 per cent transitional cells in an otherwise normal differential count.

Following an 850 c.c. venesection, the patient was placed on 1/10 gm. phenylhydrazine daily for ten days. Hemoglobin decreased to 16.8 gms., and the R.B.C. to 5,720,000. Dosage was decreased to 1/10 gm. per week and in five weeks the Hgb. level decreased to 11.6 gms., R.B.C. to 4,180,000. The drug was further reduced to 1/10 gm. every other week, remaining so until March 27, 1943 (15 months) when the Hgb. was 17.6 gms., and the R.B.C. 6,640,000. Dosage was increased and the patient took 1/10 gm. twice weekly for four months. As the blood values normalized, dosage was again decreased to 1/10 gm. per week. During the last twenty-two months the drug has been used in 1/10 gm. dosage either once a week or once in two weeks, depending on the patient's appraisal of her symptoms. This dosage schedule has maintained a normal blood count.

Case 8.—C. P., white, female, aged fifty-nine, was first admitted to the hospital February 17, 1942, complaining of loss of strength of the right side of the body of three months' duration. Systemic history revealed frequent nausea and vomiting for years. Positive physical findings were a blood pressure of 188/116, marked undernutrition, engorgement of the veins of the eye grounds and a right hemiplegia judged to be on the basis of a cerebral thrombosis. Hgb. was 23.7 gms., R.B.C. 8,120,000, W.B.C. 8,800, with a normal differential count. Two venesections of 450 c.c. and 600 c.c., respectively, were done. In one week the patient was discharged on 1/10 gm. phenylhydrazine daily.

The patient remained on the dosage of 1/10 gm. daily for seven weeks, during which time the blood values decreased to a Hgb. of 14.8 gms. and R.B.C. of 5,330,000. Dosage was reduced to 1/10 gm. three times weekly during the next eight months, the blood values remaining roughly the same. Dosage was further decreased to 1/10 gm. twice weekly and remained so until January 10, 1945, the date of her last visit, at which time the Hgb. was 18.7 gm., R.B.C. 6,630,000 and W.B.C. 12,450.

The patient's general health remained good throughout the period of therapy (thirty-five months). Disability from the hemiplegia gradually became less and during the last two years of observation there remained only a slight residual weakness of the right leg and arm.

Case 9.—M. S., white, male, aged fifty-seven, was first seen May 11, 1943, because of headaches, fatigue and recurrent mild abdominal distress. Physical examination revealed a blood pressure of 140/90 and a rather pronounced acne rosacea, but was otherwise within normal limits. Blood count showed 24.5 gms. of Hgb., 7,540,000 R.B.C., 12,500 W.B.C., with a normal differential count.

Two venesections of 500 c.c. each were done within a ten-day period, following which the patient was placed on 1/10 gm. of phenylhydrazine daily. This dosage was maintained for four weeks, during which time symptoms had practically disappeared. Dosage was reduced to 1/10 gm. three times weekly, remaining so until September 11, 1943, when the blood values showed a Hgb. of 21.2 gms. and a R.B.C. of 7,050,000. The patient was next seen May 20, 1945, when it was learned that he had dispensed with the phenylhydrazine, but had donated eight pints of blood to his neighborhood bank. In

this interval his original symptoms had recurred fairly frequently. Physical examination remain unchanged except that the spleen was now palpable 1 f.b. below the left costal margin. It was ascertained that during the eighteen months without phenylhydrazine therapy several blood counts had ranged from a Hgb. of 21.0 gms. to 23. gms. and a R.B.C. from 7,050,000 to 8,000,-000. Because of these elevated values and persistence of symptoms, phenylhydrazine therapy was again instituted in dosage of 1/10 gm. twice weekly.

Case 10.—M. C., white, female, aged thirty-four, was was first seen May 17, 1943, for "spots before eyes" associated with headaches of six months' duration. Physical examination was normal, except for b.p. of 152/100. Hgb. was 19.9 gms., R.B.C. 6,250,000, W.B.C. 5,000, with a normal differential count. One-tenth gm. phenylhydrazine was given daily for ten days, then every other day for ten additional days. Hgb. decreased to 16.0 gms., R.B.C. to 5,290,000 and the headaches and eye symptoms became less severe and less frequent. Dosage was reduced to 1/10 gm. per week, and has been continuously maintained until the patient's last visit, May 18, 1945. In this twenty-four-month interval the patient has been symptom free, except for an occasional day or so of mild abdominal distress. Hgb. values varied between 14.0 and 17.4 gms., R.B.C. between 4,790,000 and 5,890,000. The highest W.B.C. recorded was 6,250.

Case 11.—F. P., white, male, aged fifty-eight, was first seen in the hospital February 14, 1944, for physical evaluation. He complained of numbness, tingling and purplish discoloration of his hands and feet, failing memory, fullness in the head and "bloodshot" eyes in recent months. Physical examination revealed a b.p. of 184/120, florid facies, marked tortuosity of the vessels of the eye grounds and a liver edge palpable 1 f.b. below the right costal margin. Blood values showed 22.5 gms. Hgb., 10,240,000 R.B.C., 11,000 W.B.C., with normal cell distribution in the blood smear and hematocrit reading of 66. In a ten-day hospitalization period four venesections with the removal of 650 c.c., 550 c.c., 600 c.c. and 500 c.c. of blood were performed. At discharge the blood values were 20.4 gms. Hgb., 6,390,-000 R.B.C., 12,200 W.B.C. and a reticulocyte count of 1.4 per cent. At this time symptomatology was practically negligible.

Two months later the patient was readmitted for a five-day hospitalization period during which time five additional venesections ranging from 350 c.c. to 850 c.c. were done. At discharge the Hgb. was 13.1 gms., R.B.C. 4,440,000, W.B.C. 13,250 and the patient remained symptom free.

At six, eight and ten months later the patient donated blood to the Red Cross in 600 c.c. amounts each Subsequent to his last donation he was seen in the O.P.D. (February 15, 1945), at which time he was still symptom free and the Hgb. was 15.3 gms., R.B.C. 5,350,000 and W.B.C. 11,200.

Case 12.—G. T., white, male, aged fifty-three, was first seen December 27, 1932, because of a burning sensation in the toes of both feet and soreness of both soles of one month's duration. Symptoms were continuously present to a moderate degree and were severe on occasions. Systemic history revealed momentary dizzy spells, moderate dyspnea with some precordial pain on exertion, nocturia and constipation. Physical examination revealed a b.p. of 148/98, florid facies, liver edge palpable 2 f.b. below the right costal margin and the spleen palpable 2 f.b. below the left costal margin. The Hgb. was 19.9 gms., R.B.C. 6,170,000, W.B.C. 7,200, with a normal differential count. Capillary studies of the nail beds of the great toes showed dilated, engorged capillaries with a very sluggish blood flow.

One tenth gm. of phenylhydrazine was given for ten days, followed by 1/10 gm. weekly for four months. The Hgb. decreased to 15.3 gms., the R.B.C. rose to 7,300,-000 and the spleen enlarged to 4 f.b. below the left costal margin. Dosage was increased to 1/10 gm. three times weekly for the next nine months, when the Hgb. became 14.2 gms., the R.B.C. 5,340,000 and the spleen enlarged to 5 f.b. below the left costal margin. The drug was increased to 1/10 gm. twice a week until August 19, 1936, when the Hgb. was 12.8 gm. and the R.B.C. 4,600,000. Dosage was further reduced to 1/10 gm. weekly and remained so until February 11, 1938, when the Hgb. was 14.6 gms., R.B.C. 4,870,000 and W.B.C. 11,300. In the above period of more than five years of phenylhydrazine therapy the patient's general health remained good, and symptoms were reduced to occasional burning of the feet, mild abdominal distress and two short but marked periods of lightheadedness.

During the next six and one-half years (ending September 15, 1944) the patient did not use any phenylhydrazine, excepting for a period of three months from May 26, 1939, to August 20, 1939. In this latter interval there were two episodes of severe abdominal pain judged to be on the basis of splenic infarctions. The patient was last seen September 15, 1944, at which time the spleen was enlarged nearly to the umbilicus. In these six and one-half years the Hgb. varied between 13.0 and 14.0 gms., the R.B.C. between 4,600,000 and 4,900,000 and the W.B.C. between 10,000 and 12,000.

Comment

In the cases reported there was a wide variety of presenting symptoms, so that these alone might be misleading in diagnosis. Yet, relief from these very symptoms has often served as a better guide in treatment than the number of red blood cells. As does Reznikoff[55], we feel that treatment should be directed at the patient and not the blood count. This means reasonable activity, since thromboses are common, avoiding the intake of substances that might irritate an already congested gastric mucosa, and control of emotional factors.

The patients who received only phenylhydrazine treatment progressed at least as satisfactorily as those who had either venesection alone, or those who, in order to save time, had venesection at first

and then the drug. Donating the usual pint of blood at the Red Cross blood bank at three-month intervals did not control either the symptoms or the blood count in one patient, and since phenylhydrazine had previously proved satisfactory, it was again reinstated. In the cases that had venesection, hospitalization for a day or two meant considerably more expense to the patient than drug alone.

When first seen, seven of twelve patients had an increased number of white blood cells, immature white forms, or both. Three developed the leukemoid reaction described by Stealy and Sumerlin[64] in the latter years of the disease. One of these is symptom free thirteen years after therapy, which consisted of phenylhydrazine only, and in the last six and one-half years has required no treatment at all. One other patient included is very interesting, in that, from the history at least, she has had splenomegaly for twenty-three years. We know it has been present for five years, and with it there has been an increase in all the formed elements of the blood, the leukemic and polycythemic phases apparently compensating one another. Symptoms have never been sufficiently prominent to warrant drug, x-ray, or other therapy. This emphasizes the feeling that some of the blood dyscrasias may stem from the same etiology, whatever this may be. Also, it should be remembered that polycythemia vera may occur with or be a factor in the more frequent development of another disease. Tinney, Hall and Giffin[68] found peptic ulcer in 7 per cent of 163 cases of polycythemia, and more recently, Tinney, Polley, Hall and Giffin[72] reported the coexistence of polycythemia and gout. Hence, the importance of alertness in the recognition of complications or other conditions if new symptoms develop during the course of treatment.

Summary and Conclusions

1. Polycythemia vera may have a variety of presenting symptoms, though most frequently these are referred to the central nervous system.

2. In treatment, consideration should be given to the comfort of the patient as a whole rather than to the blood count. Symptoms are often a better guide than the blood level.

3. No specific or curative treatment has yet been found, but apparently satisfactory palliative measures include venesection, spray irradiation of large areas of the body, radioactive phosphorus and drugs.

4. Except in patients intolerant to phenylhydrazine, this preparation has proved equally as satisfactory as the other methods of treatment mentioned for palliative results, and, from the standpoint of cost to the patient, the most economical.

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Carbohydrate Metabolism in Osteoporosis and Paget's Disease

By Robert C. Moehlig, M.D.

and

Lt. H. Lyman Abbott, MC, AUS*
Detroit, Michigan

In this report we wish to re-emphasize the close relationship between disordered carbohydrate metabolism and certain bone diseases, namely, osteoporosis and Paget's disease. These two diseases are similar in some respects for both may occur in the same family; there is a similar familial background; the pathological process is at one stage the same (osteoporosis) in both diseases plus the fact that there is a similar lowered glucose tolerance in both diseases.[7,8,9] The main difference between these two conditions is that in osteoporosis the disease process is an atrophic or destructive one, whereas in Paget's disease it proceeds to the hypertrophic state with osteoid formation and this is associated with an increased blood phosphatase.

Osteoporosis

Sex.—In our review of ninety-four osteoporotic cases, twenty were males and seventy-four were females.

Age.—The ages ranged from twenty-three to seventy-five years with an average of 51.7 years, (Table I).

Dextrose Tolerance Tests.—Dextrose tolerance curves were made on forty of the total number of cases and this showed that there was a diabetic type of curve in thirty-five (87.5 per cent) and a normal flat curve in five cases (8.4 per cent) (Table II and Fig. 1). By a normal flat curve we mean that the highest point at three-quarters of an hour would be only 10 to 20 mg. per 100 c.c. of blood above the fasting level with a rapid return to the fasting blood sugar levels.†

* From the Department of Internal Medicine, Harper Hospital.

†We used 100 gms. of dextrose orally on a fasting stomach.

TABLE I. SEX AND AGE

	Males	Females	Ages	Average
Osteoporosis	20	74	23 to 77	51.7
	94 cases			
Paget's disease	23	17	34 to 73	53.8
	40 cases			

TABLE II. DEXTROSE TOLERANCE TEST

No. Test		Per Cent
	Osteoporosis	
40	35 Diabetic type	87.5
	5 Normal or increased tolerance	8.4
	Paget's Disease	
31	27 Diabetic type	87
	4 Normal or increased tolerance	13

TABLE III. FAMILIAL TENDENCIES

	Osteoporosis per cent	Paget's Disease per cent
Familial diabetes	35.00	32.5
Familial tallness	87.00	83.5
Familial obesity	77.6	75.0

Familial Constitutional Tendencies.—No patient in this series presented symptoms of diabetes mellitus but thirty-three patients (35 per cent) of the total number gave a familial history of diabetes mellitus (Table III). Eighty-two patients (87 per cent) had one or more members of the immediate family who were 71 inches or more in height (Table III). Seventy-four patients (77.6 per cent) had one or more members of the immediate family who weighed 200 pounds or more (Table III). Fifty patients (53 per cent) had a nodular goiter.

The condition osteoporosis produces pain in the extremities, backache, headache and muscular weakness. Every case of the ninety-four in this series complained of pain in either the back or extremities. Moderate to severe headache was frequently complained of, more so in those cases in which the roentgenograms showed osteoporosis of the skull. Weakness of the legs was also a frequently encountered symptom as was ease of fatigue. Dizziness, probably due to the accompanying arteriosclerosis, was also one of the most frequent complaints. Swelling of the legs and arms was present usually in advanced degrees of osteoporosis.

The muscles of the legs and arms are often tender to pressure; tenseness of the thigh muscles is complained of and the least trauma causes pain in the affected extremity.

Frequently the patient said that he had a likeness for sweets; however, as stated before, none presented themselves with a personal history of diabetes mellitus except an acromegalic patient who had frank diabetes mellitus.

In our series the symptoms were of from one to fifteen years in duration and of interest is the fact that in some cases five or six years elapsed between the subjective complaint of backache, headache and pains in the extremities and the demonstrable roentgen findings of osteoporosis. This discrepancy between the subjective complaints and the objective findings may lead to the diagnosis of neurosis.

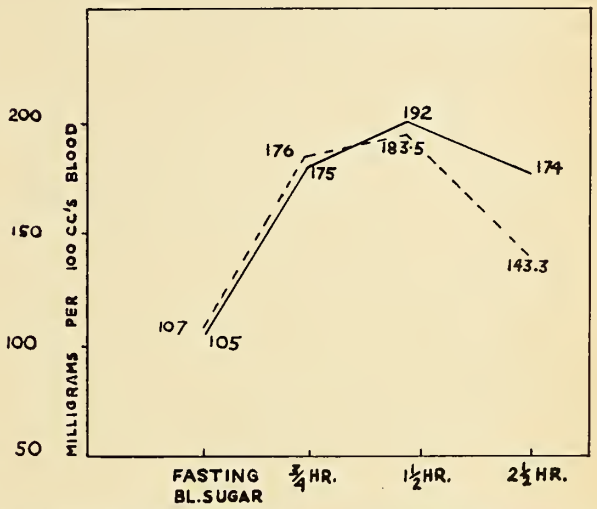


Fig. 1. Glucose tolerance test. Solid line is a composite curve of forty osteoporotic patients. The broken line is a composite curve of thirty-one Paget's disease patients.

Paget's Disease

Sex.—We reviewed forty cases of Paget's disease, of whom twenty-three were males and seventeen were females.

Age.—The age range was from thirty-four years to seventy-three years with an average of 53.8 years (Table I).

Dextrose Tolerance Tests.—Dextrose tolerance tests were made on thirty-one of these patients. Of this number, twenty-seven had a diabetic type of curve and four (approximately 13 per cent) were normal (Table II).

Familial Constitutional Tendencies.—There was a familial history of diabetes mellitus in thirteen patients (32.5 per cent) (Table III). In the Paget's group thirty-three (83.5 per cent) had one or more members in the immediate family who were 71 inches or more in height. Of the Paget's group thirty (75 per cent) had one or more mem-

bers of the immediate family who weighed 200 pounds or more. Twelve patients (30 per cent) had a nodular goiter.

The group of forty Paget's disease patients presented the usual clinical picture of this disease, the condition often being recognized first by the roentgenologist. Pain in the bones, weakness, renal or bladder symptoms due to calculi were some of the outstanding symptoms.

Pain in the pelvis, back and legs were most frequent. In advanced cases the deformities of the bones were readily recognized and progressive deafness was a common complaint where the Paget's disease was of an advanced degree in the tables of the skull.

All the cases of Paget's disease had an elevated serum phospatase. The highest reading was present in the patient shown in Figures 5 and 6, the level being 167 Bodansky units, and on two other occasions it was 122 and 133 Bodansky units.

Evaluation of the Data

It will be noted that osteoporosis is markedly preponderant in the female sex, seventy-four females to twenty males. The Paget's disease group did not show any marked difference, seventeen females and twenty-three males.

What seems to be an outstanding feature of both conditions is the fact that there is a lessened dextrose tolerance, 87.5 per cent of the osteoporotic group and 87 per cent of the Paget's group had a diabetic type of curve. Added to this is the familial constitutional tendency of diabetes and obesity. Familial tallness is also a feature in both groups.

Goiter of the nodular type was fairly common, 53 per cent and 30 per cent.

From the etiological standpoint the lessened glucose tolerance curve and the constitutional tendencies point to a connection between a disturbance of carbohydrate metabolism and calcium metabolism.

In hyperthyroidism, acromegaly and pituitary basophilism there is a lessened glucose tolerance and these conditions are also associated with osteoporosis.

That hyperthyroidism frequently produces osteoporosis is well known from the work of Hunter,[5] Snapper[1], and others.

The majority of both osteoporotic and Paget's groups had arteriosclerosis and the possibility exists that the calcium is removed from the bones and deposited in the vascular system. As is well known, diabetes mellitus is associated with arteriosclerosis.

Approximately 12 per cent of the Paget's disease and the osteoporotic groups showed, instead of a lowered dextrose tolerance, an actual increased dextrose tolerance. Ferrannini[4] found that in normal subjects parathyroid extract lowers the glycemic rate during fasting and increases carbohydrate tolerance.

Johnson[6] administered calcium gluconate alone and in combination with parathyroid extract to six dogs under ether anesthesia and the blood sugar changes were noted. Following the administration of calcium gluconate and this is combination with parathyroid extract, the portal vein blood sugar fell rapidly and continuously during the period of the experiment. The lowest levels were reached under the influnce of the combined action of calcium gluconate and parathyroid extract (both given intravenously). In the control animals the portal blood sugar showed a consistent rise. From these experiments he concluded that the fall of blood sugar is due to impaired absorption of glucose from the gastrointestinal tract. He pointed out that the extent of the fall was in relationship to the original level of the blood sugar, the higher the original level, the greater the extent of the fall. He further pointed out that the fall in blood sugar paralleled the rise of blood calcium and that there was a rather definite inverse relationship.

Certain evidence given in previous articles by Barnes and Regan,[2] Collip,[3] lends support to the view that pituitary overactivity may be an etiological factor in the production of both osteoporosis and Paget's disease. Clinical support of this theory is the fact that there are changes in the activity of the pituitary gland at the time of menopause. Likewise, functional changes in the pituitary are of course, present in pituitary basophilism and acromegaly.

The fact that there is an increased output of gonadotropic hormone at the menopause with the lessening or loss of ovarian function has led to the treatment of osteoporosis with estrogenic hormones.

As to the actual cause of the lessened glucose tolerance in both osteoporosis and Paget's disease we are not certain. The fact that these patients do not have glycosuria raises the question whether there are present arteriosclerotic changes in the kidneys with a high renal threshold for dextrose.

Certain it is that the vast majority of both groups have arteriosclerosis, however, in pituitary basophilism and acromegaly there is marked osteoporosis not infrequently with glycosuria. We are inclined to the opinion that there is a relationship between calcium, phosphorus, phosphatase and bone changes, that is, it is a chemical metabolic process rather than due to the arteriosclerotic changes. Naturally, this is merely an opinion without factual evidence. In its favor, however, is the fact that the familial constitutional tendencies of diabetes mellitus, obesity and tallness would seem to point to a constitutional metabolic background. We would welcome investigations along these same lines by others to see if our studies are substantiated.

A sufficient number of both groups in our series have been studied so that the figures as presented warrant the statement that a lessened glucose tolerance is present in the majority of patients suffering from osteoporosis and Paget's disease.

Apperly and Cary[1] also found a lessened sugar tolerance in eight cases of Paget's disease, thus verifying our work in this regard.

Diagnosis

The importance of making an early diagnosis of osteoporosis was well illustrated in several of our cases who had been treated with massive doses of vitamin D and calcium to cure a suspected arthritic condition. In one case the patient was experiencing convulsions. On questioning the family, we learned that she had been taking 500,000 units of vitamin D in addition to calcium orally daily for three months. The blood calcium was found to be 14 mgm. per cent. She had increased the dosage herself because of failure to obtain relief from back pain. She was later found to have osteoporosis of the lumbar vertebrae, a calcified goiter, a calcified fibroid, gall stones and severe generalized arteriosclerosis detected by roentgenograms. This case supports the work of Steck and associates[12] who found that increased excretion of calcium is not due solely to the removal of the microscopic deposits in the soft tissues because the increase in the urine begins before there is any microscopic or chemical evidence of excessive deposition in the soft tissues. They believe that first cellular regeneration occurs more commonly in the kidney, then calcium deposition follows. From their work they also believe that, until further information is available, arteriosclerosis should probably be considered a contraindiction to the administration of massive doses of vitamin D. We are of the same opinion in regard to the giving of calcium, cod-liver oil and Haliver oil in osteoporosis. Osteoporotic and Paget's patients almost always have arteriosclerosis, so that the giving of vitamin D and calcium would have a tendency to increase the overabundance of calcium in the various tissues.[10]

Our procedure in diagnosing osteoporosis after the history taking and physical examination was to obtain a blood calcium, phosphorus and phosphatase along with a glucose tolerance curve. This was then followed by roetgenograms over the site of the symptoms. It was found in several cases that the dextrose tolerance test would show a diabetic type of curve months before the roentgen evidence of osteoporosis.

Summary

A series of ninety-four cases of osteoporosis and forty cases of Paget's disease is presented. The ages of the osteoporotic group ranged from twenty-three to seventy-five years, average 51.7; the Paget's group ranged from thirty-four to seventy-three years, average 50.8. The sex of the osteoporosis group showed a marked preponderance of females, there being seventy-four females to twenty males. In the Paget's disease group no marked difference was seen, there being seventeen females and twenty-three males. In forty patients of the osteoporosis group who had dextrose tolerance tests, thirty-five showed a diabetic type of curve and five were normal or had an increased tolerance. In the Paget's disease group thirty-one glucose tolerance tests were made; twenty-seven showed a diabetic type of curve and four were normal or had an increased tolerance.

A familial history of diabetes was obtained in thirty-three cases of the ninety-four cases or 35 per cent of the osteoporosis group. In the Paget's disease group of forty cases, thirteen (32.5 per cent) gave a familial history of diabetes.

Familial tallness (71 inches or more) in the immediate family was present in one or more members of the family; of the osteoporotic group in 87 per cent, and of the Paget's disease group, 83.5 per cent. Familial obesity, consisting of one or more members of the immediate family who weighed 200 pounds or more was present in 77.6 per cent in the osteoporotic group and in 75 per cent of the Paget's disease group.

Fifty cases (53 per cent) of the osteoporotic

group had a goiter, whereas twelve cases (30 per cent) of the Paget's disease group had this finding.

Symptoms in the osteoporotic group of patients is often of long standing and in some cases five or six years elapsed between the initial complaint of backache, headache, pains in the extremities and the demonstrable roentgen findings of osteoporosis. No variation from normal was found in the serum calcium, phosphorus or phosphatase in osteoporosis. All patients with Paget's disease had an elevated serum phosphatase but a normal serum calcium and phosphorus. Approximately 12 per cent of the osteoporotic and Paget's disease group had an increased dextrose tolerance which we believe was due to the administration of calcium or vitamin D or both. This has a tendency to increase the sugar tolerance.

We are also of the opinion that since arteriosclerosis almost invariably accompanies both osteoporosis and Paget's disease, the administration of calcium and vitamin D are contraindicated. The same is true of cod-liver oil, haliver oil and related compounds.

Dextrose tolerance studies are a great aid in the diagnosis of osteoporosis and Paget's disease and studies of carbohydrate metabolism will probably prove of value in determining the etiology of these two diseases.

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MSMS

Mohammedans consider the *praying mantis* holy, and it is a sacrilege to kill one of these insects.

Misunderstood Postnasal Discharge

By D. F. Weaver, M.D.
Detroit, Michigan

CHRONIC POSTNASAL discharge is one of the most frequent complaints that is made by patients who consult an otolaryngologist. Although chronic sinus infection, atrophic rhinitis, allergic conditions of the nose and granular pharyngitis are prominent causes, patients with these *conditions,* combined, constitute a minority of those who give this symptom as a chief complaint. There is a large group of patients who have no organic disease of the nose or throat demonstrable, but who are more or less distressed by postnasal discharge of varying degree. It is with this group that this article deals.

Although every patient may not express his concern by mentioning all of the following thoughts, for the most part they follow a rather typical pattern. Most of them suspect or are convinced that they have chronic sinus infection. This thought may have originated from discussions with friends, or from the lay press and at times it has been suggested by physicians. As a matter of fact, treatment consisting of various kinds of solutions dropped or sprayed into the nose or sprayed into the throat may have been carried out. Irrigation of the nose with saline solution has been carried out in a few cases. Occasionally change of climate has been suggested. Usually expectoration is frequent and a number of them state that a receptacle is taken to bed with them for expectoration during the night. This is done because of the belief that the material is injurious, if swallowed, to the gastro-intestinal tract. It is thought to affect chiefly the stomach and colon. This symptom is often seen associated with the "irritable colon" and may be considered one of the causes of it by the patient. There is frequently a history of early morning "hawking" and spitting, with gagging, nausea and sometimes vomiting. The thought that the discharge is infected and "unclean" prompts this.

The presence of chronic sinus infection can be excluded by absence of anterior nasal discharge or pus in the nose and by roentgenograms of the sinuses. Atrophic rhinitis (ozena) is uncommon but when present can be recognized quite readily

by the nasal crusting, unpleasant ordor, loss of sense of smell and by the typical appearance which is familiar to the otolaryngologist. Allergic conditions of the nose can be eliminated by absence of family history of allergy, absence of sneezing and watery nasal discharge, normal allergic skin tests, by the normal appearance of the nasal mucous membrane and by absence of eosinophils in the nasal secretions.

A significant granular pharyngitis is manifested by hypertrophy of the lateral pharyngeal bands.

The treatment consists of management of the patient rather than specific local therapy.

A frank discussion, advising something of what takes place in the normal nose and throat will give comfort to most of them. The membranes of the nose, and sinuses, secrete from one to two quarts of sero-mucinous material in twenty-four hours. All of this that is not absorbed by the air in breathing, is normally swallowed. The amount that is absorbed, of course, is influenced by the humidity of the air. One should be as unaware of this function as of the heart-beat, respiration or any other bodily function. Consequently, any thought about its injurious effects when swallowed can be promptly and completely dispelled. Since this secretion is essential to the normal functioning of the nose and throat, one can substitute the thought that its absence would be quite undesirable.

It is particularly desirable that no local specific treatment be carried out in most cases since this suggests the presence of organic disease and may strengthen rather than correct this belief on the part of the patient.

In certain of these patients, however, the conviction that organic disease is present has been so strong and they have come in with such high hopes for treatment that completely negative examinations and roentgenograms, followed by a frank and tactful discussion, are not convincing to them and may arouse some resentment.

Whether or not members of this latter group should be treated locally for a favorable effect on their attitude is a matter of opinion. It is my personal opinion, however, that they should not, since they probably have other manifest or latent neurotic symptoms and if the help of a psychiatrist should become advisable his task may be easier if support has not been given to their incorrect beliefs. At this stage they may even resent the fact that they have been given specific treatment for a functional complaint.

A New Interpretation of Some So-Called Positive Patch Tests

With Special Reference to Metals Used in Industry

By S. William Becker, M.S., M.D.
Chicago, Illinois

EDITOR'S NOTE: When the above-captioned paper appeared in THE JOURNAL, we received a communication from Harry Keil, M.D., Dermatologist, New York, N. Y., which we in turn submitted to the author, Dr. Becker. We are glad to publish Dr. Keil's communication with Dr. Becker's reply.

Discussion

HARRY KEIL, M.D., New York: In the January issue of THE JOURNAL (45:65, 1946) S. W. Becker discussed a new interpretation of patch test reactions in relation to certain metals used in industry, such as nickel and chrome. The conclusions and suggestions offered by this observer are of interest not only to industry but also to the physician who encounters cases of contact dermatitis arising from non-industrial as well as industrial exposure. For this reason, it seems desirable to give a dissenting opinion on some views postulated by Becker as well as to clarify certain data presented in his paper.

1. *Hypersensitiveness to "Chrome."*—No one, to my knowledge, has proved that persons acquire hypersensitiveness of the skin from contact with the metal "chrome" or with chromium in ores (of the type of ferrous chromite) or with such salts as chromic sulfate. In these forms chromium has a valence of 3. On the other hand, chromium with a valence of 6 occurs in the oxygenated derivatives, such as the chromates and bichromates, which are well-known senitizers and primary irritants. These and other physiologic differences between chromium with a valence of 3 and chromium with a valence of 6 have been known for about 100 years (Ducatel, 1834)[2], though not in the manner here expressed, and such differences have been discussed by Bonnevie (1939)[1] and especially by

McCord and Prendergast (1942).[4] There seem to be no group reactions between these two forms of chromium and they are as different as chlorine in its gaseous state and chlorine in sodium chloride. Contrariwise, hypersensitiveness to chromates appears to parallel hypersensitiveness to bichromates, and it is immaterial which one of these oxygenated compounds is utilized in patch tests. When sensitization to chromium metal has been claimed, as in chrome-plated materials, it has not been sufficiently understood that the sensitization was in all likelihood concerned with the underlying nickel material (nickel ion). In short, there is no evidence for hypersensitiveness to "chrome" or chromium having a valence of 3. Failure to evaluate this difference in properties from those shown by compounds in which chromium has a valence of 6 has been the cause for the successful prosecution of illegitimate claims in court, a point ably discussed by McCord and Prendergast (1942).

2. *The Papulopustular Reaction to Nickel in Atopic Dermatitis.*—Becker cited at length Sulzberger's observations on the papulopustular reactions seen in patch tests with nickel sulfate and other heavy metals in atopic dermatitis. Sulzberger recognized that these peculiar responses differed from the vesicular and eczematous reactions seen, for example, in true nickel hypersensitiveness, and he regarded these papulopustular responses as a special form of "non-allergic, primarily irritative or intrinsically damaging local effect." Becker, on the other hand, considered the papulopustular lesions as allergic in nature.

This subject has become so confused that it is necessary to start at the beginning. Steiner (1929)[6] reported positive patch tests to various heavy metals in some 81 per cent of cases that he classified as neurodermatitis (corresponding to the term atopic dermatitis). Steiner stressed, in particular, the high incidence of positive patch tests with nickel sulfate. Sulzberger and Goodman (1936)[7] reported the occurrence of papulopustular reactions to nickel sulfate in a "fairly representative proportion" of cases of atopic dermatitis and believed that this substantiated the observations of Steiner. The confusion began at this point. Careful study of Steiner's report shows that Steiner's cases were, in reality, instances of nickel dermatitis and nickel hypersensitiveness, in which the clinical features happened to resemble neurodermatitis. Indeed, some of his patients were nickel platers with nickel dermatitis, and the others probably had, at least, nickel hypersensitiveness. The data given by Steiner are scattered throughout his article but, when they are studied carefully, it becomes apparent that, at least in the case of nickel sulfate, Steiner obtained genuine positive patch tests of eczematous type, and not papulopustular reactions. If my interpretation is correct, then it will explain why I cannot agree with Sulzberger when he allied his papulopustular reactions with the responses obtained by Steiner. At the same time, I am in general agreement with Sulzberger's view that the pathogenesis of these papulopustular reactions differ fundamentally from that of the genuine vesicular (eczematous) patch tests seen in nickel hypersensitiveness.

The problem however becomes more complicated when we come to assess the significance of these papulopustular reactions in atopic dermatitis. Without going into detail, my observations in cases of this sort are not in agreement with those reported by Sulzberger and Goodman in regard to the incidence of such responses to patch tests with nickel sulfate or other heavy metals. I have not encountered such reactions in atopic dermatitis, except under certain circumstances which need not be discussed here. I may add that Jadassohn (1930)[3] and Bonnevie (1939)[1] denied that positive patch tests of any kind, more particularly nickel sulfate, occurred in their experiences with atopic dermatitis. Sulzberger himself (1931-32)[8] in an earlier paper found negative patch tests with nickel sulfate in 10 cases of atopic dermatitis, and Becker[5] likewise noted the rarity of positive patch tests in this condition, although he apparently used chiefly protein materials for such tests.

From this analysis, it appears that hypersensitiveness to nickel ion or other heavy metals is at least doubtful in instances of atopic dermatitis when patch tests are used. It should be realized that nickel dermatitis is often a great imitator and may resemble dermatophytid, dyshidrosis, neurodermatitis and so forth. The papulopustular lesions described by Sulzberger are, as stated by this observer, independent of the true allergic responses to patch tests with nickel sulfate; they are not based on an allergic mechanism as Becker postulated but are accidental, insignificant, and their occurrence has been denied by a number of observers. Finally, there are no group reactions between the nickel ion and any other heavy metal, except cobalt in salt form; and it is interesting that this group reac-

tivity excludes iron, which falls in the same group as nickel and cobalt.

3. *The New Interpretation of Patch Tests.*—There is considerable evidence that the major seat of characteristic changes is in the epidermis in contact dermatitis due to simple chemicals of nonprotein nature, such as nickel sulfate. A genuine positive patch test constitutes, in my view, definite evidence of epidermal hypersensitiveness, although the diagnostic value of the test must be correlated with clinical data. This statement is meant to exclude so-called positive patch tests to protein materials, such as tuberculin, oidiomycin, human dander and protein extracts of various sorts. Patch test responses to these protein materials are in my opinion based on other mechanisms, and in many instances their significance is far from clear. Becker attempts to conciliate positive patch tests. to simple chemicals with "dermal" hypersensitiveness (the latter regarded by most authors as the "shock site" for atopic dermatitis), but it seems to me that this correlation is based on two phenomena that bear no definite relation to one another. In his Case 4, he obtained a positive patch test (edema, vesiculation) to a nickel coin in a patient who presented clinical features that were consistent with genuine nickel dermatitis. Becker interprets the lack of vesicles in the original eruption as suggesting "dermal" sensitization. This reasoning is not valid, for it is based on the view that clinical vesicles are absolutely essential to the diagnosis of contact dermatitis. It is by no means rare, for example, to see a simple scaly redness, as in nail polish dermatitis, whereas the patch test may show vesiculation because the conditions of contact are more intense under the patch test than the clinical exposure. In Becker's Case 2, several positive patch tests (varying from follicular papulovesicular to edematous papulovesicular responses) to various nickel-contaning materials were interpreted by this observer as indicating dermal hypersensitiveness simply because he expected bullae to appear with this intensity of reaction. There is little doubt in my mind that this patient had epidermal hypersensitiveness to nickel ion, and it may be noted that previous tests had also been positive to "cobalt," a common group reactor in nickel hypersensitiveness. The relation of the nickel hypersensitiveness to the protracted course in this complicated case must, of course, be evaluated in terms of the clinical data. However, it should be remembered that, aside from many other factors involved in prolonging the clinical course of contact dermatitis, further exposure to nickel, non-occupational as well as occupational, is by no means rare, since nickel is an ubiquitous allergen. The lack of bullae in an eruption or in a patch test does not, in my view, mean dermal hypersensitiveness primarly. To conclude, the evidence for dermal hypersensitiveness offered by Becker cannot be considered satisfactory. That the blood vessels play a part in contact dermatitis seems certain, but that alterations in these vessels or any other structures in the cutis represent the major pathologic changes in patch tests, such as those described by Becker, appears to be doubtful.

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S. William Becker, Chicago: I am appreciative of Dr. Keil's kindness in calling attention to the fact that the designation "hypersensitivity to chrome" does not apply to the metal itself, but to chromates and bichromates, and his presentation of additional referential data dealing with hypersensitivity to compounds of these two metals. His personal interpretation of Steiner's cases and of the reactions in my patients is not without danger, because he did not see the patients. Even when such reactions are studied visibly at first hand, they are difficult to evaluate accurately, since individual workers interpret them differently. My reports constitute my personal interpretation of the reactions as seen by myself.

Since there is still some controversy over the role of even the fairly well established vesicular patch test in interpretation of contact dermatitis, it is to be expected that many further controversial contributions will be made before the significance of the positive follicular reactions to salts of nickel and chrome will be accurately evaluated. It is hoped that my paper and the suggestions of Keil will stimulate others to study and report on this important phase of occupational dermatology.

Editorial

THIOURACIL—A WARNING

The recent report by More in the February 9 issue of the *Journal of the American Medical Association* indicated a small but definite mortality rate present in toxic thyroid patients treated with thiouracil. In this report twelve of the finest clinics in the world reported 1091 cases with eight deaths for a .7 per cent mortality rate. While this rate is small yet it is not inconsiderable for the number of cases treated medically by a group representing the best medical brains in the country. Agranulocytosis seems to have been the principal cause of death although there were several other complications caused by thiouracil such as fever, skin rash, lymphadenopathy, salivary gland swelling, liver damage, scleredema and myxedema. None of these latter complications appear to have caused death however.

There is no question but that thiouracil has certain advantages. The average patient may continue on with his regular work while being treated for his disease. His basal metabolism can be brought down to the vicinity of zero where surgery may then be much safer. While it is still too early to evaluate the final results there is some chance of curability by the use of this drug. This is rather questionable as the drug does not attack the roots of toxic thyroid disease. The disease itself is the end result of a chain of events set in motion somewhere in the brain, from there traveling to the anterior lobe of the pituitary where an increased thyrotropic hormone is produced which excites the thyroid gland into hyperplasia and hyperproduction of thyrotoxin which in turn circulates in the bloodstream to cause all the symptoms of thyroid disease. Since thiouracil acts only as a block on the synthesis of thyroxin it is plainly evident that the disease itself is not being attacked at the roots but only a temporary so-called road block is being thrown across the succeeding mechanisms leading to toxic thyroid. Hence it appears evident that a great deal more work will have to be done before the curability of toxic thyroid disease is accomplished from a medical angle.

The drug also has certain disadvantages. In addition to the dangers mentioned above there is the nuisance of long continued treatment with ceaseless watching of the patient by an ever-attentive clinician. There is the expense of long continued treatment both from a laboratory and medical angle. Lastly, there really is a double mortality rate to be considered here in that the mortality rate from thiouracil treatment must be added to that of surgery where both thiouracil and surgery are used. Here it is interesting to note that seven of the largest American thyroid clinics have reported 8,737 operative cases within the last five years with a total mortality rate of .6 per cent which is approximately the same as for thiouracil.

From these facts it would seem that certain conclusions should be drawn. Because of its inherent dangers it would seem that thiouracil never should be used upon unco-operative, unintelligent patients nor should it be used upon patients remotely situated from their attending physician. Treatment as constituted at the present time probably should not be used on cases where the economic factor is paramount inasmuch as it means everlasting treatment with resultant laboratory and clinical expense as against the present day short period of treatment by operation. It should not be used on any degree of toxic gland below those of a wildly toxic nature inasmuch as the surgical mortality rate is practically zero in this group.

On the other hand, there are definite indications for its use at the present time. Certainly the wildly toxic glands should be treated with thiouracil where surgery is apt to find its mortality rate greatest. Thiouracil definitely should be used on all thyrocardiacs, on all iodine-resistant glands and lastly, on recurrent thyroids. As to this last particular phase of the subject we believe that if surgery has been done properly, cases of recurrent thyroid disease should be few and far between.

Recently, thiouracil has been released for general use by clinicians and members of any cult who may write prescriptions. This means it will be dispensed to patients unaware of its dangers by innumerable men who have scanty knowledge of its manner of use or its dangers. Under such a regime the death rate is bound to rise sharply.

(Continued on Page 652)

Defining a Specialist

Years ago there was a nationally known teacher in Michigan who would not allow himself himself to be called a surgeon, but preferred to be described as a medical man who operated. He always looked upon himself as being a doctor first, and secondly a surgeon, because during years of practice he developed a proficiency in surgery. In his time a specialist prided himself in his broad experience secured in the general practice of medicine which served as a stepping stone to a specialty, but the present drift is away from all that. Now to be a recognized authority in any branch of medicine, the student must confine himself strictly to a rigid regime of training, during the first few years after graduation, which very definitely segregates him within the bounds of a well-defined field, thereby passing over any emphasis on general practice. By diligently applying himself to this type of training he eventually places himself in a position to be recognized by one of the Specialty Boards.

The Specialty Boards are trying to develop high type specialists, and in that endeavor they are to be commended, yet they are losing sight of the importance of our medical schools to develop good doctors first, and that the training of specialists is a secondary function. The goal of the Boards, no doubt, will be attained some day, but theirs is a program which will take time to accomplish, perhaps a quarter of a century, but in the meantime what is to become of the older specialist who developed much as the renowned teacher, and who, through no fault of his own, is not eligible to qualify under present board rulings?

President's

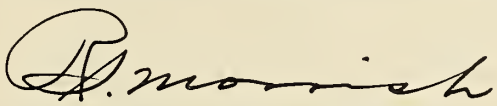


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Theoretically, nothing should happen to him; he has done excellent work; he has taught many of the younger men to the end that they might qualify for certification, but in practice something is happening to him. His years of experience, coupled with adequate post graduate study, are not receiving proper recognition in that hospital appointments, or recognition by governmental agencies are dependent pretty much on whether he is certified or not. As an example, the recent contract entered into by the Veterans Administration and the Michigan Medical Service, whereby the doctors of Michigan would render services to beneficiaries of the former, with the Michigan Medical Service acting as disbursing agent, the question arose as to who could qualify as a specialist. The Veterans Administration answer was, "One certified by his respective Board." This answer was not satisfactory to The Council of the Michigan State Medical Society, and a committee was appointed to confer with the Veterans Administration with the idea of securing a more liberal interpretation of its definition. Finally, it was suggested that a specialist should be able to qualify under one of the following headings:

1. A diplomate of a specialty Board.
2. A Fellow or an Associate Fellow of the Colleges of Physicians and Surgeons.
3. Members of the official organizations of the various specialties, such as the American Roentgen Ray Society.
4. Professors or Associate Professors in recognized medical schools.
5. Chiefs of the special services in accepted hospitals.
6. In addition to the above-mentioned categories, individual doctors of medicine who are qualified by experience to do specialized work may be selected by a Special Committee composed of the officers of the local county medical society and the District Councilor who shall act as chairman.

This latter plan was unanimously adopted by the Executive Committee of the Council, and in my opinion it should be generally satisfactory, for it will eliminate the dangerous implications contained in the original one. Had the original definition been allowed to stand, some of the ablest men of our state would have found themselves pretty much out of the picture. It was for their protection that the Council devoted serious study to the matter of recognition of meritorious ability, and decided not to sanction any contract that would "define" out the backbone of our profession.



President, Michigan State Medical Society

THIOURACIL—A WARNING

(Continued from Page 650)

There is no attempt being made here to disparage thiouracil as a treatment of toxic thyroid disease. It has constituted a remarkable step forward. However at this time it is certainly wise to recognize definite limitations, its disadvantages and its advantages. It is necessary to assay all of these factors properly so that the forward progress will be a healthy one. Clinicians who use the drug should thoroughly acquaint themselves with all its dangers that its forward progress may be the more healthy. Unquestionably this is only the first step leading to further discoveries which will be far more valuable in the treatment of toxic thyroid disease. For the good of the drug we cannot help but feel there has been some fallacy in placing the drug on the open market at such an early date.

R. L. MUSTARD, M.D.

ACTION NOW

WE HAVE believed for many months that opposition to the Wagner-Murray-Dingell Bill is not enough. Opposition must be expressed at once by every medical man who hopes to continue in the unhampered practice of medicine. Senators and representatives should hear from each one of us now and often. Let them begin to know who you are, and that you have a mind which you intend to express.

But that is not enough. To defeat this bill which seems to mean so much to the people we must offer more or BETTER PLANS. We have demonstrated that the medical profession can care successfully for the emergencies and catastrophies which befall the people. We have suggested how that experience can be made available to the whole people, the whole United States. A set of principles has been carefully outlined that can fulfill the wish of the people for security. These were adopted by the Conference of Presidents and Other Officers of forty-two State Medical Societies, and immediate action suggested on account of the emergency. The American Medical Association House of Delegates adopted the plan in principle and directed a six months study by the Council on Medical Services and Public Relations. At the time we questioned whether there would be six months in which to make this study. The hearings on the Wagner-Murray-Dingell Bill are well advanced and the six months are far from over.

We petition the Conference of Presidents to take over leadership and sponsor the medically approved principles of medical service as a substitute for the drastic, compulsory, political, foreign plan now being considered by Congress. We cannot wait many more months—Congress is at work now, and in no uncertain mood. At the hearings on S. 1606 the very first day, Senator Taft branded the Wagner-Murray-Dingell Bill as socialistic, and Senator Murray threatened to have him thrown out. Senator Taft then promised to introduce a health measure, himself. Let us take him at his word and have the medically-sponsored principles officially placed before the American people. Why should we wait until the present Wagner-Murray-Dingell Bill is reported out of committee, and possibly adopted?

We have a plan so far superior that there is no comparison. We know that the political medicine proposed will not be for the best interests of the people who must suffer from it. They have seen what politics does to other projects. They have recently had a sample of what political direction of the practice of medicine has done to the service for veterans. And they have seen how medically directed service can and has rescued the situation. They have seen Michigan Medical Service in action with the veterans care. They have seen care for the veterans being given in hundreds of cases every day by the home doctor, the family doctor, the doctor of the patient's choice.

Time is short. There are not months in which to consider some truly American method of providing the care and security the people are supposed to be demanding. If the American people are to have a chance at our proposed plans they must be introduced in the congress. ACTION NOW is Demanded. Who will assume leadership? The Conference of Presidents who have already shown remarkable leadership, or shall we wait the assigned six months, and possibly be TOO LATE?

CLOTURE?

HEARINGS on the Wagner-Murray-Dingell Bill have been held in the Senate Committee on Education and Labor of which Senator Joseph E. Murray (one of the authors of the bill) is Chairman, beginning on April 2, 1946. Letters from Senator Murray say that the wide interest in this measure is such that only representatives of national organizations can be heard, and he set the day for the American Medical Association as April 17, 1946. He said however that any organization wishing to submit testimony might present it in

writing, and it would be published in the official proceedings of the committee, where any members of the committee who wished might read it. That is scant favor to the one group which will be most affected by the bill should it pass.

We ask, "Should it pass?" There has been studious propaganda to the effect that this could not happen here—that this bill will not pass. One here and one there has an inside tip that Senator So-and-So has said the bill cannot get out of committee—that there will never be hearings. We have all heard this, but here are the hearings. The bill might come up to vote at any time, for that committee will almost certainly report it out. It will then be on the floor of the Congress. If this bill passes it will take away the independence of the medical profession, and will substitute a guided economy in the administering of medical services foreign to anything we have ever had. We abhor the thought of what may come, so far as medical service to the people is concerned. The English system has been pointed out to us as a sample as bad—as something we do not want. The English system is not what we would be getting. Over in England many of the doctors who work under the system like it. They have the panel for certain groups of poor and laboring people who would not otherwise pay, who by the panel system do bring in some returns, which in many instances are enough to carry the doctor's overhead, leaving him free to make his living out of his private practice, which he retains.

Not so in the Wagner-Murray-Dingell plan for American doctors and people. Here the plan is to be all-inclusive. Yes, Wagner-Murray-Dingell say the doctor may serve under the plan or, if he choose, stay in private practice. Where will the private practice come from when every person in the country is in the scheme by compulsion? The patient will have involuntarily paid for the service, and if he runs true to the American form he will demand what he has paid for. The doctor will have been compelled into a politically dominated service where his chief function may be the filling out of quadruplicate eight-page reports, and the doing for the patient in the way of medical services what some non-medical bureaucrat has directed.

Is something being foisted upon the American people by trickery and chicanery? Are pressure groups following Bismark and the so-called social trends of Central Europe of the past few decades?

SPEAKING BUREAUS

MANY REQUESTS are coming to headquarters office for speakers who can talk to lay groups about the socio-economic problems of the medical profession. People in general recognize that something drastic is happening to the whole field of medicine. They appreciate the great advance in therapeutics, the wonderful work done during the war both at the front and at home, and are grateful. They wish to understand our problems and to help us. They are asking to be instructed, and we are the ones who can and must supply the ammunition.

There is a right and a wrong way of approaching the public. One of the Congressmen said there are only 160,000 doctors to please, but there are 60,000,000 people back home who are voters. They are the ones in the long run who must be satisfied. That holds from the medical standpoint also. What returns we receive from our practice does not concern them in the main so much as what medical services they will be able to get. But they want good service, and that is our opening.

We must not do as one doctor's wife did before a woman's club. She told that under the W-M-D Bill her husband's income would not supply her with a periodic new fur coat. One doctor, president of a County Medical Society, talked before a civic group and dwelt throughout on what the proposed plan would do to his income. Both of these groups were more than ever convinced that maybe the W-M-D Bill was a good thing. That is not the approach. People do not care about medical incomes and at heart neither do we. What we are after is the best service that can be rendered to our patients. We know that can only be done by the time-tried American ways, that have already made America the most advanced nation, in matters medical, in the world. That was not accomplished by bureaucratic domination—by a dozen supervisors to each doctor.

We are not sure that the politicians who are trying to put this plan upon the American people would not, from policy, see to it that the financial returns to the doctor in general would be as good if not slightly better than now. Senator Wagner has said as much. The high rated surgeon and the outstanding specialist would undoubtedly feel the pinch, but they are in the great minority. How many of us took up the practice of medicine with a financial predominating outlook?

The majority of the profession are in the pro-

fession from an altruistic desire to be of service. That is the point to be stressed.

SPECIALIZATION MUST SLOW UP

While the Editor is soaking up southern sunshine, it is my privilege to take over this spot for a man who has earned state-wide recognition for his editorials. I do not attempt to fill his shoes. My ideas are drawn from a comparatively limited experience. So, drawing on personal experience, it occurred to me that the factors which caused me to by-pass general practice are also influencing other young men away from it. I believe something should and can be done about it.

* * *

There are two regrettable results facing the medical profession if we persist in de-emphasizing general practice. Either we will provide the ammunition for the politicians who are screaming about the unequal distribution of medical care in rural areas and shackle ourselves with socialized medicine; or if we manage to withstand the politician we will lose to the osteopaths who are already taking over many of the smaller communities by default.

The trend in this direction probably began about the turn of the century when medicine itself began taking on new stature and rapidly adding a wealth of new information, new techniques, and even new fields of practice. Specialization became necessary just as in the evolution of the automobile industry where today one man may know only how to make a crankshaft and nothing more about the operations of manufacturing an automobile.

One may simply ask: Have we gone too far?

It is significant that many of our older specialists "drifted" into a specialty from general practice. The younger specialists of today are products of a rigid production schedule for the most part, by-passing any emphasis on general practice. Actually, we have fostered the trend by our own methods. My alma mater, for instance, has no place on its staff for a general practitioner. There are no residencies specializing in general practice. In fact, residents are taught rigid segregation of medical cases into specialty fields and a specialists "code" requiring them to stay within their own field. The old joke about specializing in disease of the right eye only has some counterpart in fact.

From the standpoint of the individual, several factors influence his career. Early in school he grasps the way medicine is organized in a teaching center and obviously concludes that general practice is merely a clearing station for specialists. No effort is made to present any other conclusion! Furthermore, he can see the advantage of more regular working hours, probably a bigger income, and social and educational advantages of a larger community where he is likely to locate. By the simple psychological manipulation of sublimation he projects himself into the place of medical prominence enjoyed by his professor and decides "That's for me."

Medical schools should recognize as their first duty the education of doctors for general practice. The training of specialists should be a secondary function. Somehow, the individual must be shown that the front line of medical practice performs a service to humanity second to none. He should be taught self-reliance in all fields of practice rather than the ability to segregate patients for specialists.

Probably the best way to teach an individual about general practice is by experience. The best way to alter medical curricula is to convince the educators every student is to be a general practitioner first of all. If our teaching centers would all require graduate students to have engaged in general practice for three years before they are eligible for a residency the pendulum would swing into place almost over night. We would then have more general practitioners for rural areas by mandate of the profession and undoubtedly more would stay by choice. In one single stroke we could silence the biggest gun of the politician and stop the inroads of the osteopath. At the same time we would probably develop better basically qualified specialists for the future.

J. E. Livesay, M.D.

Editor's Note: This editorial appeared in *The Bulletin* of the Genesee County Medical Society, and is a challenge. The Editor has long believed that specialists should have a period of general practice to establish a perspective on the whole field of medicine before devoting their whole time to a specialty. We had selected this editorial for reprinting. Just before sending our material to the printers, we received another copy from W. H. Harm, M.D., Chairman of the General Practice Section of the Michigan State Society, who sees in it an endorsement of his section. We are glad to reprint the editorial.

TAFT BILL S2143

On May 3, 1946, Senators Taft of Ohio, Ball of Minnesota and Smith of New Jersey introduced in the Senate a Bill to become the National Health Act of 1946. A review will appear in the next issue of The Journal. It provides a Cabinet post of Health, State provisions for care of low income groups, and use of non-profit voluntary health services to be available to all, with authority for deductions for health care premiums from the salaries of Federal Employes.

ON THE RUN

According to a recent survey the incidence of leukemia in radiologists for a fifteen-year period is ten times greater than in physicians who are not radiologists.

* * *

Things not learned well at the outset are quite easily forgotten.

* * *

Shock encountered in malarial infections requires whole blood or erythrocyte administration, not plasma.

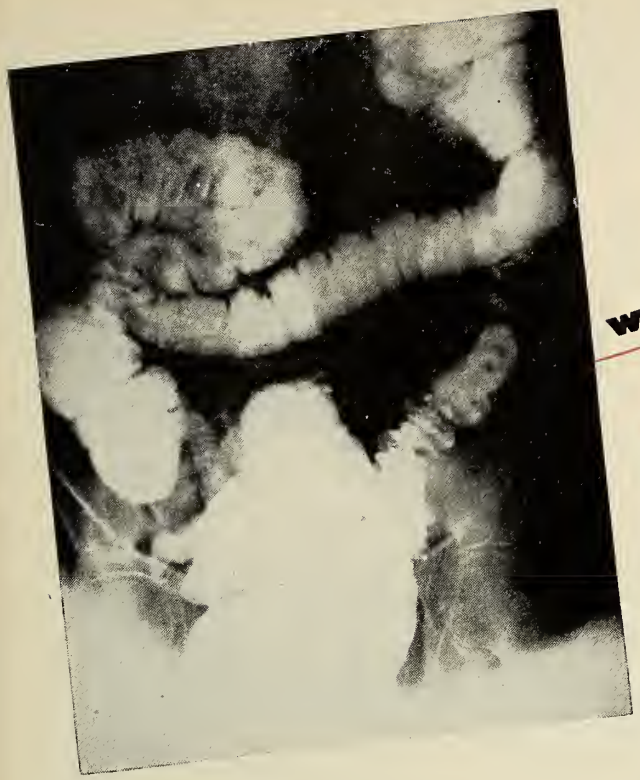
* * *

About 10 per cent of carcinoma of the stomach arises in the cardia.

* * *

Excess rouleau formation in a thin blood smear for malaria constitutes an unfavorable prognostic sign.

—Selected by W. S. Reveno



when spasm means pain . . .

PAVATRINE with PHENOBARBITAL affords potent, swift, non-narcotic relief through relaxation of gastrointestinal smooth muscle.

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Indicated for relief of:
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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Say you saw it in the Journal of the Michigan State Medical Society

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

MICHIGAN QUARANTINE REGULATIONS CHANGED

Quarantine regulations were removed from five communicable diseases by unanimous vote of the Michigan State Council of Health on March 13. If the patient is isolated no quarantine will be enforced on members of the household for scarlet fever, meningococcic meningitis, poliomyelitis, measles and chickenpox.

The Council also included streptococcal infections of the upper respiratory tract under the regulations governing scarlet fever.

The regulations require quarantine placards for only two diseases: smallpox and diphtheria. The use of a placard is not prohibited in other diseases, but is left to the discretion of the health officer. Similarly, in all diseases except diphtheria and smallpox, both immune and non-immune contacts of cases are allowed to go and come, provided that the case is adequately isolated.

The Council defines isolation as "the separation of a person suffering from a communicable disease . . . from other persons" and defines quarantine as "the prohibition of persons, animals, or things entering or leaving the premises . . ."

The same precautions will still be required for isolating the patient having any of these diseases but exposed persons will not be quarantined.

The 1946 quarantine regulations for smallpox and diphtheria remain the same. In both of these diseases it is possible to determine which of the exposed persons might endanger public health and only these are quarantined.

With reference to smallpox, the nearly absolute protection of recent vaccination is recognized and only contacts refusing to be vaccinated are quarantined.

For diphtheria contacts, a readily available laboratory test determines which of the contacts harbor diphtheria organisms. These contacts with a negative nose and throat are released provisionally to live elsewhere following one negative swab and are released entirely if a second swab is negative. Those electing to reside on the premises are isolated until the case is released.

The Council's decision conforms with recommendations from the American Public Health Association's Committee on Communicable Disease Control and brings Michigan into line with more than twenty other states and several foreign countries.

Members of the State Council of Health are: President, Dr. Henry F. Vaughan, Ann Arbor; Dr. C. L. Hess, Bay City; Dr. Harold E. Wisner, Detroit; Dr. Wesley H. Mast, Petoskey; and Dr. Kenneth A. Easlick, Ann Arbor.

The 1946 edition of "Michigan Regulations for the Control of Communicable Diseases" is just off the press and is available on request from local health departments or from the Michigan Department of Health, Lansing 4.

SMALLPOX VACCINATION URGED

The U. S. Public Health Service advised the state health commissioner in April that there was an epidemic of smallpox on the west coast imported from the Orient. All local health officers were immediately notified of this and urged to begin smallpox vaccination campaigns since with present transportation systems it would be entirely possible for a person exposed on the west coast to arrive in Michigan during the communicable stage of the disease.

A small poster stressing vaccination, suitable for physicians' waiting rooms, is available from local health departments or the Michigan Department of Health, Lansing 4.

DOCTOR COWAN TO DIRECT VD BUREAU

John A. Cowan, M.D., M.S.P.H., will become director of the Bureau of Venereal Disease Control on June 1, 1946. He is being released from the U. S. Public Health Service to replace Nobel W. Guthrie, M.D., who had served as acting director of the bureau since April, 1944. Dr. Guthrie left April 2 for the Marine Hospital, Memphis, Tennessee.

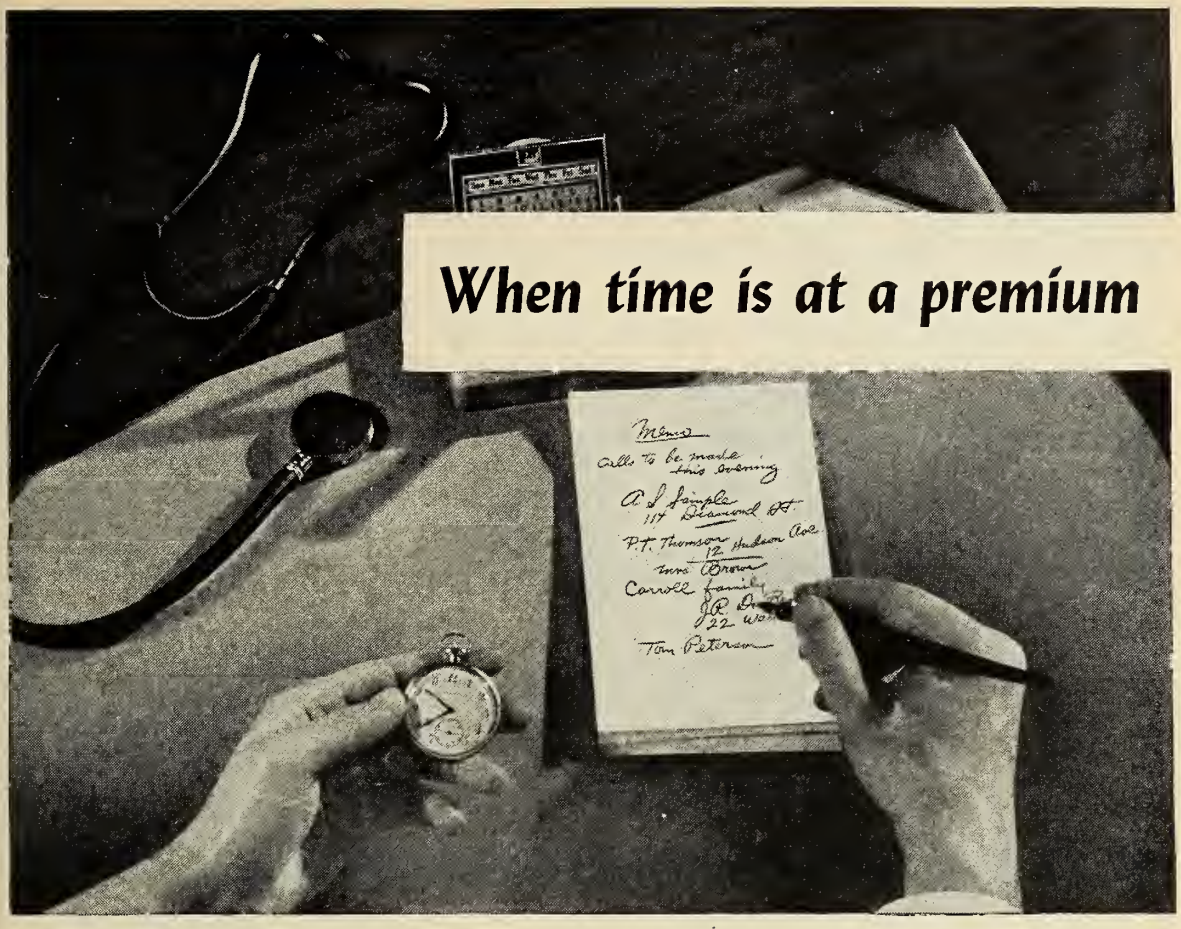
Dr. Cowan has been on loan from the U. S. Public Health Service to the Oklahoma State Department of Health where he was director of the Venereal Disease Control Division and acting director of the Division of Local Health Service. A native of Wisconsin, Dr. Cowan received his M.D. degree from the University of Minnesota in 1930. In 1940 he was granted the degree M.S.P.H. from the same school. Before joining the Public Health Service Dr. Cowan spent four years in private practice, four years as director of the North Dakota State Health Department's division of preventable diseases, and three years as director of the Woodbury County (Iowa) Health Department.

J. K. Shafer, M.D., also of the U. S. Public Health Service, is acting director of the bureau until Dr. Cowan arrives. Dr. Shafer has been assigned to Wayne County as venereal disease control officer since July, 1943. He will be in the Lansing office on Monday, Tuesday and Friday of each week.

MICHIGAN BEGINS MICROFILMING BIRTH AND DEATH RECORDS

On April 9 the first microfilm roll of vital records was mailed from this Department to the Bureau of the Census. This photographic process will replace hand transcriptions of records beginning with those of January, 1946. On a 100-foot roll of film 1,600 records can be recorded. Michigan's birth and death records average about 175,000 a year.

(Continued on Page 697)



PYRIDIUM

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affords several distinct advantages

EASE AND CONVENIENCE OF ADMINISTRATION

Pyridium is convenient to administer. No laboratory control, accessory medication, or other special measures are necessary for effective Pyridium therapy.

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Therapeutic doses of Pyridium may be administered with complete safety throughout the course of cystitis, pyelonephritis, prostatitis, and urethritis.

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A new Jones Motor-Basal Metabolism machine can be installed within a three-week period for veterans. A slightly longer period required for others.

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FEDERAL SECURITY AGENCY
U. S. PUBLIC HEALTH SERVICE
Washington 14

Dr. Louis J. Hirschman
7815 E. Jefferson Ave.
Detroit 14, Mich.

(Through the Medical Officer in Charge, U. S. Marine Hospital, Detroit, Michigan)

Dear Doctor Hirschman:

Doctor Linson has informed me of your letter of resignation of January 23, 1946, and the basis upon which you find it impossible to continue as Consulting Proctologist at the Detroit Marine Hospital.

I appreciate your position in the matter of fees. However, I regret that compliance cannot be effected with your request that the terms of your appointment incorporate the recently adopted Michian Uniform Fee Schedule. There appears to be no alternative but to accept, rather reluctantly, your offer of resignation. The termination of your appointment is to be made effective the close of business March 31, 1946.

I trust that your affiliation with the Marine Hospital staff has been a pleasant one and would like to express my appreciation on behalf of the service for your invaluable assistance in the past.

Sincerely yours,
(signed) THOMAS PARRAN
Surgeon General

Thomas Parran, Surgeon General
U. S. Public Health Service,
Washington 14, D. C.

(Through the Medical Officer in Charge, U. S. Marine Hospital, Detroit, Michigan)

My dear General Parran:

Your letter of March 12th accepting my resignation to the Marine Hospital is herewith acknowledged.

I have been very happy to have been of service to this institution for many years and hope that my services have been of some advantage to all concerned. As a past president of the Michigan State Medical Society, I cannot do otherwise than uphold the position of our organization in the adoption of a uniform fee schedule for all governmental agencies. I cannot see any reason for there being any difference in fees paid by various departments of our same Government. This is only one point of irritation between your department and the medical profession in general.

I trust that some arrangement can be made so that my successor in this position and those throughout the country, who are rendering service to patients in the Marine Hospitals as well as in other Public Health Hospitals at great sacrifice to themselves, can at least be partially compensated by fees similar to those adopted by the Michigan State Medical Society.

Very sincerely yours,
LOUIS J. HIRSCHMAN, M.D.

AT HOME OR AWAY

SPOT TESTS

SIMPLIFY URINALYSIS

NO TEST TUBES • NO MEASURING • NO BOILING

Diabetics welcome "Spot Tests" (ready to use dry reagents), because of the ease and simplicity in using. No test tubes, no boiling, no measuring; just a little powder, a little urine—color reaction occurs at once if sugar or acetone is present.

Galatest
FOR DETECTION OF SUGAR IN THE URINE

Acetone Test (DENCO)
FOR DETECTION OF ACETONE IN THE URINE

THE SAME SIMPLE TECHNIQUE FOR BOTH

1. A LITTLE POWDER



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COLOR REACTION IMMEDIATELY



A carrying case containing one vial of Acetone Test (Denco) and one vial of Galatest is now available. This is very convenient for the medical bag or for the diabetic patient. The case also contains a medicine dropper and a Galatest color chart. This handy kit or refills of Acetone Test (Denco) and Galatest are obtainable at all prescription pharmacies and surgical supply houses.

Accepted for advertising in the Journal of the A.M.A.

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HAY FEVER
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Treatment Sets—Three Vial

Packages containing 3—5 c.c. vials (100, 1000, and 10,000 Noon Pollen Units per 1 c.c. respectively) sufficient for pre- and co-seasonal treatment of one patient.

For Treatment of Spring and Early Summer Symptoms

Contains equal parts of: June Grass—Orchard Grass—Sweet Vernal Grass—Timothy—Red Top—Bermuda Grass

Code POLEE.....Packages.....Net $4.50

For Treatment of Late Summer and Fall Symptoms

Set No. 1 (3 Vial)—Contains equal parts of: Common Ragweed—Giant Ragweed

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In Memoriam

Lyle D. McMillan, a member of the Northern Michigan Medical Society, died on February 18, 1946.

Dr. McMillan, son of the late William and Susan McMillan, was born in Bloomingdale, Michigan, on August 23, 1889. His early education was in the public schools of Van Buren County. He was a graduate of the Kendallville, Indiana, High School and entered the State University at Ann Arbor at the age of sixteen. After obtaining his B.A. degree he remained at the University as assistant to Dr. G. Carl Huber in Histology.

After receiving his Master's Degree he served in several high schools as a teacher of science in both Petoskey and Hancock, Michigan. Later he spent several years in the Philippines in U. S. Civil Service and upon his return to the states completed his medical course at the University of Michigan and served his internship at Charity Hospital in Cleveland.

A veteran of World War I, he spent six months in France as a surgeon of the U. S. Marine Corps.

In July, 1917, he was married to Miss Birdie Leone Knowles. To them two daughters, Jean and Sylvia Sue, were born.

Dr. McMillan practiced medicine in Onaway, Michigan, from 1922 to 1932, and then in Ohio and Indiana for several years.

He came to Mackinaw City in 1941 and was married February 20, 1942, to Mrs. Beatrice Craddock.

He leaves to grieve his passing, his widow and her son Thomas; his daughters Mrs. Don L. Lash and Sylvia Sue who recently was released from the Women's Army Corps; three grandchildren, Terrence, Dennis and Judith Ann Lash; two sisters, Mrs. Edwin Cluff of Sheboygan and Miss Mary McMillan of Bloomingdale, Michigan, and two brothers, Dr. F. F. McMillan of Charlevoix and Harold P. McMillan of Ann Arbor, Michigan.

—G.B.S.

AIR DISINFECTION IN HOSPITALS

Q. *Are any of the methods of air sterilization recommended for general use in hospitals and nurseries?*

Martha O'Malley, M.D., Boston.

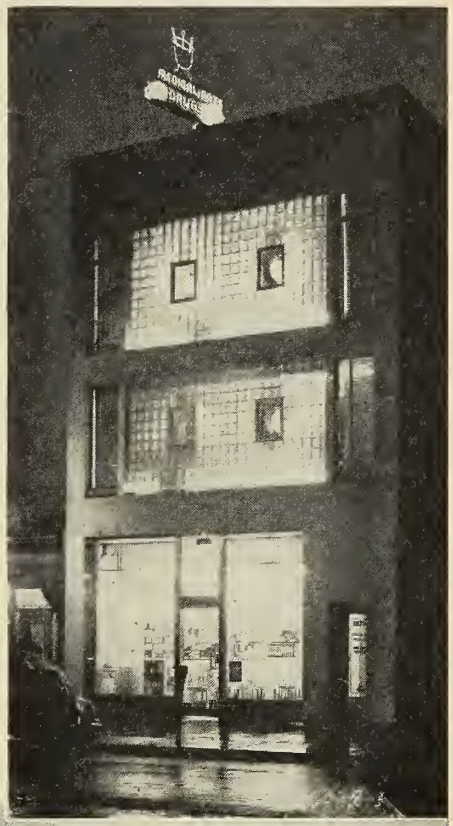
A. Treatment of floors and bedclothes with oil emulsions to hold down infected particles of dust and lint has proved of sufficient value in military barracks and station hospitals to recommend trial in civilian hospitals. Other methods of air disinfection are still in the experimental stage. High intensity ultraviolet irradiation is fairly effective against droplet nuclei, but its use at present is limited by harmful effects on the eyes and skin. There is not good evidence that glycol aerosols accomplish much under practical conditions of room occupancy. The use of antiseptic mists is also limited by toxicity, odor or corrosiveness to metals and clothing.—*Journal of the American Medical Association,* January 19, 130:184, 1946.

Say you saw it in the Journal of the Michigan State Medical Society

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What's What

MSMS membership doesn't cost—it PAYS!
You're expected to attend
* * * MSMS Annual Session * * *
Detroit, September 25-26-27, 1946
* * * A Stellar Program * * *

The thirty-third Clinical Congress of the American College of Surgeons will be held at the Waldorf-Astoria Hotel, New York, September 9-13, 1946.

* * *

The city of Bessemer (Gogebic County) has been certified by Procurement and Assignment Service as being in need of a doctor of medicine.

* * *

The American Medical Golfing Association will hold its 29th tournament at Lakeside Golf Club, San Francisco, on Monday, July 1. All AMA Members are invited to attend. Write Bill Burns, 2014 Olds Tower, Lansing 8, Michigan, for application blank.

* * *

W. W. McGregor, M.D., Detroit, is the author of an original article "Observations on the Surgical Treatment of Hernia" which appeared in *Annals of Surgery,* November, 1945, number.

Procurement and Assignment Service for Michigan ended its activities as of April 1, 1946. All future correspondence regarding procurement and assignment activities is to be addressed to Procurement and Assignment Service in Washington, D. C.

* * *

The International Grenfell Association is in need of a house officer, either man or woman, for its main hospital at St. Anthony, North Newfoundland. Further information may be obtained by writing the Association at 156 Fifth Avenue, New York 10, New York.

* * *

The State of Illinois has issued a certificate of incorporation to Associated Medical Care Plans which corporation will include all state and local medical care plans that comply with the minimum standards for medical care approved by the AMA Council.

* * *

E. C. Texter, M.D., Detroit, has been appointed as Chairman of the Housing Committee for the 1946 MSMS Annual Session in Detroit. The appointment was made by W. B. Harm, M.D., Detroit, General Chairman of the Detroit Committee on Arrangements.

(Continued on Page 672)

OWEN CLINICAL LABORATORY

THE laboratory is located in rooms 1551-1559 David Whitney Building.

AND is open daily from 9:00 A. M. to 5:30 P. M., except Sundays.

PATIENTS can be sent to the laboratory at any time during these hours.

WHERE patients cannot come to the laboratory a member of the staff will call and make what examinations are desired at an additional fee according to the distance.

MESSENGERS will gladly be sent to your office or to a patient's home to pick up specimens without charge.

SEROLOGICAL tests run daily except Sunday and the reports ready by 11:00 A. M. the following day.

ALL other tests reported as promptly as the nature of the specimen permits.

NO examinations made directly for a patient. All reports must go through the attending physician.

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In the Nutrition Problems of
CHRONIC CHOLECYSTITIS

Because of the low fat intake which is frequently necessary, many foods and beverages are denied the patient with chronic gall bladder disease. If dietary curtailment becomes too drastic, however, nutritional deficiencies are apt to develop, adding further complications and physical discomfort.

The delicious food drink prepared by mixing Ovaltine with skim milk provides many of the nutrients considered essential in hepatobiliary disease, without appreciably increasing the fat intake. Its biologically adequate protein, readily utilized carbohydrate, B complex and other vitamins, as well as essential minerals aid in satisfying the need for these nutrients. This readily digested food supplement makes a nutritionally excellent as well as delicious component of the extra feedings which are frequently required in the management of chronic cholecystitis.

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Ovaltine

Three servings daily of Ovaltine, each made of
½ oz. of Ovaltine and 8 oz. of skim milk*, provide:

CALORIES	426	VITAMIN A	2058 I.U.
PROTEIN	32.3 Gm.	VITAMIN B_1	1.16 mg.
FAT	2.5 Gm.	RIBOFLAVIN	1.55 mg.
CARBOHYDRATE	66.3 Gm.	NIACIN	6.81 mg.
CALCIUM	1.12 Gm.	VITAMIN C	39.6 mg.
PHOSPHORUS	0.939 Gm.	VITAMIN D	400 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reported values for skim milk.



Picture of a man's peace of mind at knowing his wardrobe is correct, from Whaling's

WHALING'S
MEN'S WEAR • 617 WOODWARD
DETROIT 26 • MICHIGAN

(Continued from Page 668)

Richard S. Farr, M.D., of Detroit has been given the Borden Undergraduate Research award at the University of Chicago for his paper on experiments with white blood cells. Dr. Farr, a recent graduate of Wayne University College of Medicine, is a Lieutenant (jg) in the Navy Medical Corps.

* * *

H. S. Johnson, Public Relations Counsel for the Medical Society of Virginia, visited the Executive Offices of the Michigan State Medical Society on April 1 to learn details of the modern Public Relations program developed and in operation by MSMS in accordance with the instruction of its House of Delegates.

* * *

H. B. Zemmer, M.D., Lapeer, Chairman, R. J. Hubbell, M.D., Kalamazoo, W. H. Huron, M.D., Iron Mountain, and John R. Rodger, M.D., Bellaire, members of the MSMS Rural Health Committee, represented the Michigan State Medical Society at the AMA Rural Health Conference held in Chicago, March 30.

* * *

Ira Downer, M.D., of Detroit has been appointed by Dr. David D. Henry, President of Wayne University, as a member of a War Memorial Committee. The group will consider possibilities of establishing permanent war memorials to students, faculty members, and alumni who have died in the service of their country.

* * *

Walter Grierson Maddock, M. D., formerly associate professor of surgery, University of Michigan, and member of the medical corps of the United States Army, has been appointed Associate Professor of Surgery at Northwestern University, and Wesley Memorial Hospital, Chicago, Illinois.

* * *

Franklyn H. Top, M.D., Detroit, has left for London whence he will go to Europe and occupied countries as consultant on diphtheria. His work will be for the Preventive Medicine Service of the Surgeon General's Office, U. S. Army. Germany, Austria, France, Holland, and other countries, where a large number of diphtheria cases exist, will be covered by Dr. Top.

* * *

The Oklahoma State Medical Association is sponsoring a special train from Kansas City to San Francisco for the American Medical Association meeting of July 1-5, and invites the members of all other state associations interested to join its physicians on this trip. For further information write the Rainbow Travel Service, 1st National Bank Bldg., Oklahoma City, Oklahoma.

* * *

W. B. Harm, M.D., Chairman of the Detroit Committee on Arrangements for the 81st Annual Session of the Michigan State Medical Society, has appointed a Detroit Hospitality Committee composed of: S. W. Insley, M.D., Thomas G. Amos, M.D,, Wyman D. Barrett, M.D., William Bromme, M.D., C. L. Candler, M.D.,

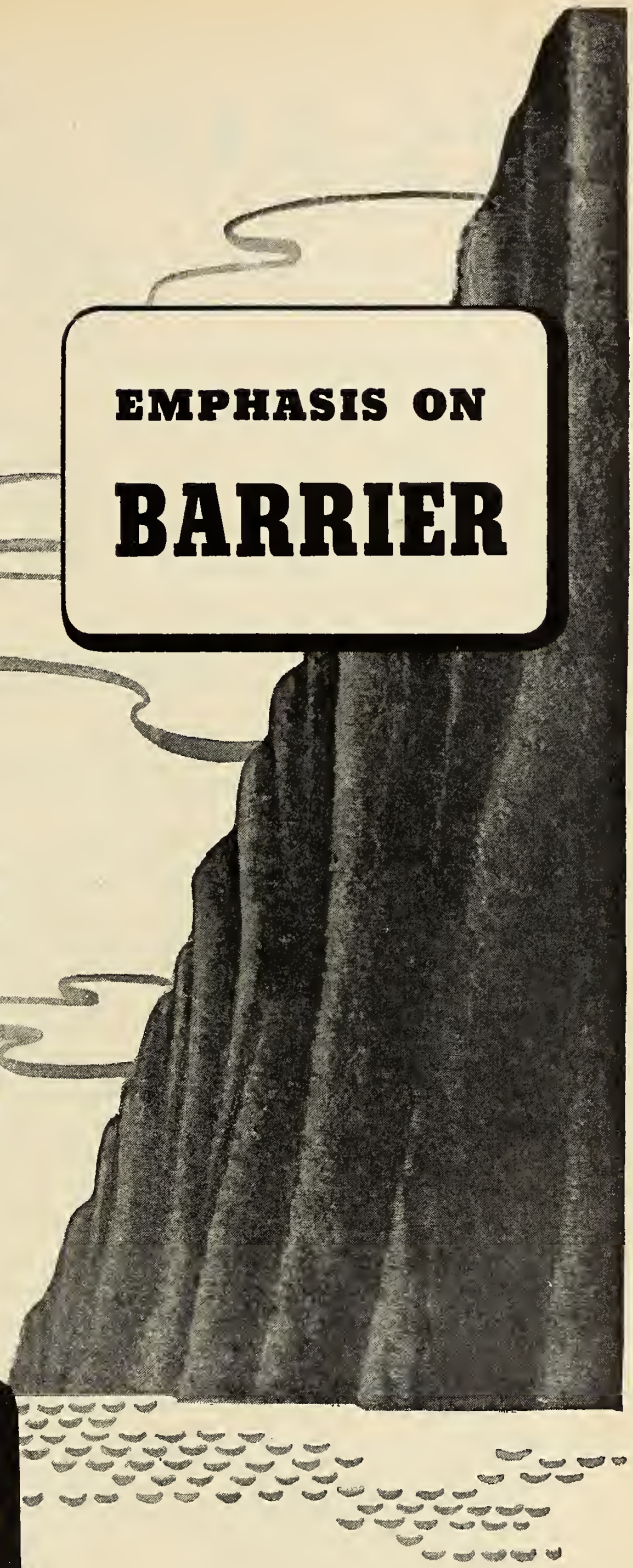
(Continued on Page 676)

AUTHORITATIVE clinical investigators place strong emphasis on the importance of the barrier in conception control.

In a recent comprehensive report[1] physicians indicated an overwhelming preference for the diaphragm and jelly method (93% of 36,955 new cases).

In keeping with these expressed opinions we continue to suggest that for the optimum in protection the physician prescribe the combined use of occlusive diaphragm and spermatocidal jelly.

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Competent observers report:

"Jellies and creams used without mechanical devices yield relatively high protection, but studies have not proven them fully dependable to block the external os, or to invalidate all sperm."[2]

"When no type of occlusive pessary can be fitted, or when the woman refuses to use one, the only other reliable method is the use of the condom. With proper technic and instruction this method is highly reliable but has many disadvantages which the diaphragm method overcomes."[3]

1. Clinic Reports: Planned Parenthood Services in the United States. Human Fertility 10: 25 (Mar.) 1945.
2. Dickinson, R.L.: Techniques of Conception Control. Baltimore, Williams and Wilkins Co., 1942.
3. Warner, M.P.: J.A.M.A. 115: 279 (July 27) 1940.

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(Continued from Page 672)

W. P. Chester, M.D., Ralph A. Johnson, M.D., J. J. Lightbody, M.D., Victor E. Nelson, M.D., E. C. Texter, M.D., and Frank Weiser, M.D.

* * *

The Indianapolis Star of April 7, 1946, in commenting on the Wagner-Murray-Dingell Bill, states: "It is scarcely conceivable that Congress could accept such extreme socialism, although the public should be alert to the danger. The least this country can do is await inevitable failure in Great Britain, which is risking a similar plunge."

* * *

Hearings on Wagner-Murray-Dingell Bill were started April 2, 1946, and the American Medical Association was invited to testify before the Committee on Education and Labor on Wednesday, April 17, 1946, at 10:00 a.m. Very generous for the one most interested group—the group whose very existence as unchained beings is at stake!

* * *

"Section of the Vagus Nerves to the Stomach in the Treatment of Peptic Ulcer" by Lester R. Dragstedt, M.D., Professor of Surgery, University of Chicago, was the program of the Henry Ford Hospital Medical Society, Tuesday, April 9, 1946. The notice of this important meeting did not reach us for an announcement and invitation to the members to attend.

* * *

The Wisconsin Alumni Research Foundation announces that workers at the University of Wisconsin have developed a new strain of mold which opens the possibility of doubling the nation's supply of penicillin. Spores of penicillin-producing mold were exposed to powerful ultraviolet rays which produced the changes resulting in the new strain which is being supplied to producers gratis, on request. The new strain is known as Q176.

* * *

The American College of Chest Physicians will hold its oral and written examinations for Fellowships on June 29, 1946. For information and application write the Executive Secretary at 500 North Dearborn St., Chicago 10, Illinois.

The College will hold its Twelfth Annual Meeting at the Sir Francis Drake Hotel, San Francisco, June 29-30 and July 1-2.

* * *

The Ionia-Montcalm Medical Society held a round-table discussion on "Socialized Medicine" at the Stanton Hotel, Stanton, on April 16. Professor Paul D. Bagwell of Michigan State College presented the facts on the Wagner-Murray-Dingell Bill and answered the questions of the Ionia-Montcalm members. E. P. Bunce, M.D., of Trufant, President of the County Society, conducted the round-table discussion.

* * *

Jay C. Ketchum, Detroit, Executive Vice President of Michigan Medical Service, has been appointed Director of the newly created Division on Prepayment Medical Care of the AMA Council on Medical Service and

(Continued on Page 680)



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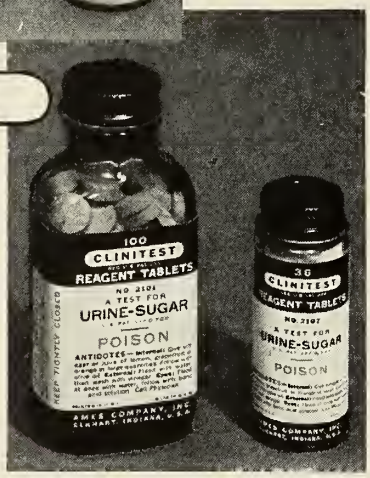


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(Continued from Page 676)

Public Relations, effective March 15. Mr. Ketchum will serve on a part-time basis according to arrangements made with MMS. His principal duties for the present will be to co-ordinate existing medical care plans in states and to aid states in establishing their own prepayment medical care plans.

* * *

Michigan Hospital Service is undergoing difficulties with some of the member hospitals claiming they are not being paid their full per diem costs. This is understood when it is remembered that Michigan Hospital Service has paid to its hospitals the following sums: 1940, $5.42; 1942, $8.81; 1943, first half, $8.36, last half, $8.74; 1944, first half, $8.69, last half, $9.40; 1945, first half, $9.43, last half, $10.28. Thus have hospital costs steadily risen.

* * *

Mr. Jay Ketchum, Executive Vice President of Michigan Medical Service, has been appointed Director of the newly created Division on Prepayment Medical Care. This appointment, announced by the Executive Committee of the Board of Trustees, became effective March 15. Mr. Ketchum will serve on a part-time basis according to arrangements made with Michigan Medical Service. His principal duties for the present will be to coordinate existing medical care plans in states and to aid states in establishing their own prepayment medical care plans.

* * *

From the time of its first service March 1, 1940, to December 31, 1945, Michigan Medical Service has returned 83.60 per cent of its fees to its subscribers in the form of services, $14,379,081.97, at an administrative cost of 12.53 per cent, $2,155,310.11. It now has a reserve for contingencies of $695,174.97, enough to run the organization for nearly seven weeks. During 1945 Michigan Medical Service paid to doctors for services rendered $4,298,285.18. Administration expense for that year was 11.32 per cent.

The number of services in the various types of surgery, and the cost of those services is indicated by two graphs reproduced in this journal.

* * *

Thiouracil, a new compound derived from thiourea, which has been found useful in controlling the major manifestations of hyperthyroidism, has recently been made available for prescription use by Squibb. Thiouracil is indicated in the treatment of hyperthyroid patients having either a diffuse toxic goiter or a single or multiple nodular goiter. It is recommended both for pre-operative use and for the treatment of patients in whom surgery is contraindicated. It is also possible that Thiouracil will be found of value in acute thyroiditis.

Since granulocytopenia is a reaction with an estimated incidence of 2.5 per cent among patients taking Thiouracil, the patient should be warned to discontinue the drug and see his physician immediately if sore throat, fever, coryza or malaise are noted.

(Continued on Page 684)

Say you saw it in the Journal of the Michigan State Medical Society

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(Continued from Page 680)

An Opportunity for another Michigan First.—On page 570 of this issue will be found a very important announcement by Frank Van Schoick, M.D., Jackson, Chairman of the Michigan Branch of the American Academy of Pediatrics and of the Child Welfare Committee of the Michigan State Medical Society. The announcement is self-explanatory. It is hoped that every member of the State Society will read it and will respond to the challenge and the opportunity that has come to Michigan doctors.

As Dr. Van Schoick says, "This venture offers the practicing physician the opportunity to determine the needs in Michigan and thereby determine the best methods to meet these needs." Let us all watch for the questionnaire, fill it out and return it promptly. By so doing, we can register another *Michigan First.*

* * *

More than 2000 surgeons and other doctors of medicine are expected to attend the three-day Assembly of the International College of Surgeons, United States Chapter, in Detroit, October 21-22-23.

Among the principal speakers to be heard in Detroit's Masonic Temple will be Mr. Hamilton Bailey of London, England; Francisco Grana, M.D., of Peru; Felipe F. Carranza, M.D., of Argentina; Manual Manzanilla, M.D., of Mexico; Albert Jirasek, M.D., of Prague; Wayne W. Babcock, M.D., of Philadelphia, and many other leading surgeons of the United States.

Herbert Acuff, M.D., of Knoxville, Tennessee is President and Custis Lee Hall, M.D., of Washington, D. C., is President-Elect of the U. S. Chapter, International College of Surgeons. Detailed information and copy of the Program may be obtained by writing Secretary L. J. Gariepy, M.D., 16401 Grand River Ave., Detroit 27, Michigan.

* * *

Lunetta I. Powers, M.D., Muskegon, was made an Honorary Life Member of the Muskegon County Medical Society at its April 2 meeting.

Doctor Powers, one of the first women physicians in the State, was honored by the Muskegon County Medical Society for her long service as a Doctor of Medicine in the community. Doctor Powers was graduated by the Woman's Medical School, Chicago in 1897 and began practice in Muskegon in 1900, thus completing almost a half-century of medical service. Doctor Powers was the first head of the obstetrics department of Hackley Hospital in Muskegon and continues to serve on the general staffs at both Mercy and Hackley Hospitals in that city.

Congratulations, Doctor Powers, on your election to this high honor.

* * *

The eastern half of the 10th Councilor District held its District Meeting, under the leadership of Fred H. Drummond, M.D., of Kawkawlin, on April 18 at Alpena.

Members of the Alpena-Alcona-Presque Isle and of the Bay-Arenac-Iosco County Medical Societies attended the

(Continued on Page 686)



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(Continued from Page 684)

session at the Alpena Golf Club at which MSMS President R. S. Morrish, M.D., Flint, spoke on "The Teaching and the Doing of Medical Economics."

MSMS Secretary L. Fernald Foster, M.D., Bay City spoke on "Michigan's Uniform Fee Schedule for Governmental Agencies."

Gordon Goodrich, Assistant Executive Director of Michigan Medical Service in Detroit, spoke on "The Veterans Administration plan with the Doctors of Michigan for Home-town Medical Care."

Thirty-nine doctors of medicine attended the dinner meeting in Alpena.

* * *

O. D. Stryker, M.D., Fremont, Councilor of the 11th District, presided at the District Meeting held at Muskegon on April 9 and attended by fifty-five members, representing all counties in the District.

MSMS President R. S. Morrish, M.D., Flint, spoke on "Medical Economics."

Secretary L. Fernald Foster, M.D., Bay City, discussed "Medical Public Relations" and "The Uniform Fee Schedule for Governmental Agencies."

F. Gordon Goodrich, Detroit, Assistant Director of Michigan Medical Service, spoke on "Michigan's Plan for Home-Office Medical Care of Veterans."

MSMS Council Chairman E. F. Sladek, M.D., Traverse City, discussed the "Fourteen Firsts of Michigan." Wilfrid Haughey, M.D., Battle Creek, Councilor and JMSMS Editor, spoke briefly on the activities of THE JOURNAL.

* * *

Medical Men Honored.—The services in war and peace of Monroe County's medical men, 150 strong, were honored by the Monroe County Historical Society at its anual dinner meeting on March 28 in Monroe, Michigan.

The "elder statesmen" of the medical society dissertated on the good old days with fond reminiscences; and a bit of appropriate song and drama recalled amusing and illustrative experiences of medical practice. Then medical progress with its attendant problems and how they might be met received serious and constructive thought.

It's an idea!

Every time something of this nature occurs, the thermometer which registers public approval of the medical profession climbs like the mercury on a hot summer day. Every County Society can profit by the Monroe party—if circumstances of a similar nature call for one in each locality.

* * *

Michigan's National Leader.—Is it not possible to put an end to our Fabian tactics and get a Bill before Congress to sidetrack the current Wagner-Murray-Dingell Bill? Piecemeal as our planning has been we now have a good plan but leadership is lacking. Perhaps Michigan must still lead the way. *The one man who has sounded a clarion call and stands out as a National*

(Continued on Page 688)

Say you saw it in the Journal of the Michigan State Medical Society



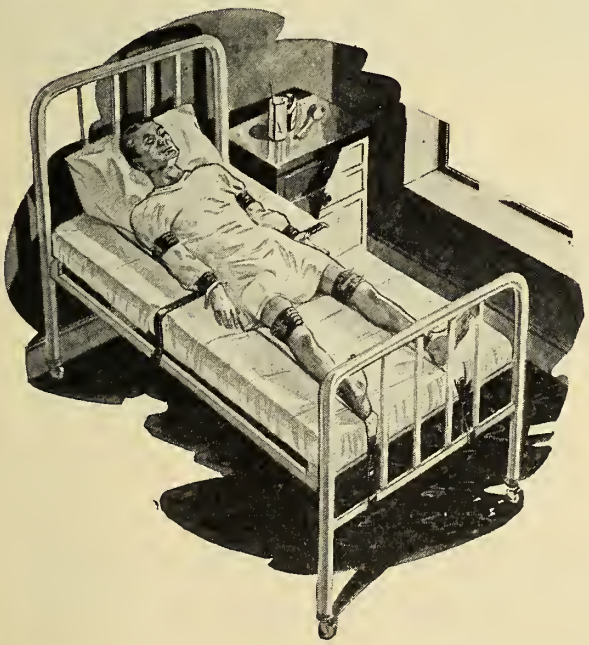
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(Continued from Page 686)

Leader is our past President of the MSMS, Dr. A. S. Brunk, of Detroit. He moves so quietly about his business that to many of us he is unknown. Yet during his term as President of the Michigan State Medical Society he not only administered his duties admirably, but he found time to stir up the Presidents of other state societies to follow Michigan's lead in planning for the future: He presided at the meeting of Presidents in Chicago in December. He is a diplomat, a statesman and an executive. A man we can all trust to speak for us and act for us. And if and when Congress enacts legislation creating an additional cabinet member to safeguard the health of America. Dr. Brunk has the calibre to fill that high office. Moreover, he has earned it.

—*Oakland County* (Michigan) *Medical Bulletin,* March 1946.

* * *

Veterans Administration contract for "home-town medical care."

"Physicians are asked to observe the following simple rules in treating veterans under the Michigan Medical Service contract:

"1. Do not perform any services without authorization indicated on reporting form issued by Michigan Medical Service.

"2. Do not charge veterans for unauthorized examination or treatment of a service connected disability. Space is provided on the reporting form for physicians to indicate additional services required.)

"3. Process and return forms promptly. (Payment of pensions to veterans is withheld until all forms are completed.)

"4. Whenever in doubt as to procedure or extent of treatment, call the Outpatient Department of the Veterans Administration, Buhl Building, Detroit, CHerry 4905."

—*Detroit Medical News,* April 15, 1946.

* * *

Michigan, "model for the Nation."—Col. James C. Harding, acting assistant medical director for auxiliary services, referred to Michigan's out-patient service for veterans as "the model for the Nation and an example of the medical progressiveness of the State of Michigan."

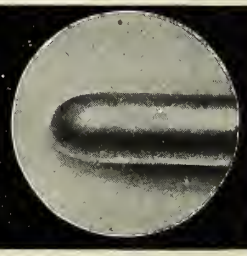
He recalled the national plea made to the medical profession by Maj. Gen. Paul R. Hawley, VA's chief medical director, for help in solving its terrific problem in out-patient service.

This is the medical examination of veterans applying for pensions. There are now 1,100,000 active cases a month, compared with 590,000 in July, 1945. VA did not have enough physicians to handle it.

"Why," said Col. Harding, "there voluntarily walked into my office the heads of the Michigan State Medical Society, the Michigan Medical Service, the Michigan

(Continued on Page 690)

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(Continued from Page 688)

Hospital Service, the Michigan Hospital Association, and others.

"They produced the Michigan Plan. Now VA authorized the Michigan Medical Service to obtain the examination of veterans, giving them the choice of physicians in their community who are qualified.

"This solved our out-patient worries in Michigan. The Michigan plan has worked so well that California and New Jersey have adopted it. Fifteen to twenty other states are planning to follow it.

"I can't say too much for the Michigan medical profession's work on this plan. For we are going to need service like this for years to come!"—*Detroit News,* March 21, 1946.

* * *

Progressive P. R. Policies Adopted by Wayne County Medical Society.—The following recommendations of the WCMS Press Committee were adopted by the Council of the Wayne County Medical Society, Detroit, on April 5, to establish a policy of action in public relations:

1. That the Society have more civic objectives, such as seeing-eye dogs, getting instruments for veterans, counsellor service for high school students to help them pick their profession, aggregate donation of doctors to charitable organizations, etc.
2. All news releases must be approved by the senior Wayne County Medical Society officer then available, if impossible to be placed before the Council.
3. That it shall be permissible for the names of doctors to be used in connection with any unusual cases that may come under his care if authorized by the Wayne County Medical Society.
4. That unusual or interesting cases be reported to WCMS.
5. That new discoveries or treatments in the field of medicine be reported to the WCMS for proper publicity.
6. That the need for a Medical Center in Detroit be publicized as much as possible.
7. That the hospitals be notified that the Society has a Public Relations Counsellor and that all news of interest to the public be reported immediately to the Society headquarters. Furthermore, that the Society does not look with too much disfavor on hospitals receiving publicity.
8. The death of any doctor should be immediately reported to the office of the Wayne County Medical Society.

* * *

American GI got best medical care given any army, anywhere.—"The American armed forces had better medical care in World War II than the soldiers of any army ever before received" according to Major General Norman T. Kirk, Surgeon General. "More men were saved from death, more men were returned to military usefulness and more men were spared suffering and mutilation and disfigurement than was dreamed possible at

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the end of World War I, or, for that matter, at the beginning of World War II."

General Kirk had high praise for the Medical Corps officers for their humanity in the care of paraplegic patients, lessening the great suffering of those with paralysis of the legs and lower part of the body.

Of the "remaining task," General Kirk reported that at the end of December, 1945, there were 180,000 patients in Army hospitals and that by the end of June, 1946, this number will still be approximately 70,000. At the end of November there were 11,350 patients in the nine centers set aside for plastic and hand surgery, who, it was estimated, still needed almost 31,000 operations. This, of course, means that a considerable number of Medical Officers, especially plastic surgeons, must remain in uniform longer than they would like. In addition to these cases, Army doctors are caring for approximately 5,000 neuropsychiatric patients, 2,000 of whom are in closed wards, 1,000 patients with tropical diseases, 1,800 with tuberculosis and 300 blind men who are being rehabilitated, and the thousands of other casualties of the war who, by the orders of the Chief of Staff, the Secretary of War, and the President of the United States, must not be discharged to civilian life or transferred to the Veterans Administration till Army doctors have done for them all that modern medical science and skill can do.

* * *

Medicine in Sweden.—Chester Adams, M.D., of Grand Blanc, recently discharged from the Army, reported to the membership at its March 12 meeting some impressions he gleaned while on a tour of Swedish hospitals. Dr. Adams went on this trip with a group of medical officers while he was waiting to leave the European continent for home.

He found the hospitals marvelous institutions, clean, well cared for, with good equipment to work with. No wards with more than eight beds, most are semi-private. Old hospitals are being abandoned and new ones taking their place. Facilities for research are limited and inadequate. They seem to lean on the U. S. and England for this. While the hospitals seem to be things of beauty they do not appear to be efficiently built or operated according to the American way of thinking. Care is taken to keep up the morale of the patient.

Independence is not stressed in medical training but supervision is thorough. Most of the doctors in these larger hospital centers appear to bask in the light of their chiefs and lack the initiative of the American doctor. Dr. Adams gave as an example the young graduate who wanted a surgical appointment, received same, but when the Neuro-surgeon wanted an anesthetist the chief surgeon told him to study anesthesia, and that if he didn't his medical training was at an end. As a result, after months of anesthesia training, he was an expert in that line but probably will not bereleased for surgical work which he would prefer.

Dr. Adams stated that he did not have the opportunity to visit in the smaller centers but only in the larger teaching institutions. He seemed to feel that the personal relationship was not apparent. The patients, to the doctors he saw, could easily become guinea pigs.

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Hospitalization is $1.00 per day for three weeks and after that time $1.50; however, the patient actually pays about $8.00 per day in his taxes.

Swedish medicine is state medicine and has its advantages and disadvantages, but the doctors in this particular group did not seem to think it came up to the American standard.—*Genesee County Medical Society Bulletin, March* 26, 1946.

* * *

Hearing on Wagner-Murray-Dingell Bill.—The second week of the Senate Committee on Education and Labor hearing the proposed Federal Health Scheme ended on Friday.

The hearings continued each day with a noticeable lack of Committee membership present. This is easily understood when one considers the vast amount of important pending legislation before other Senate Committees. Many Senators have committee appointments at the same hour. One may also be safe in saying that there is nothing new or of recent interest appearing before this committee. All that has been said by witnesses to date is a repetition of what has been said over and over before the Pepper Sub-Committee on Wartime Health and Education, as well as those statements we have read in propaganda flowing from the many Federal Bureaus which pose as guardians of the public health.

One most conspicuous and damaging observation to those who profess to believe in freedom of expression and thought is the similarity of language and the frequent identical expressions of witnesses.

Senator Donnell of Missouri has forced admissions from most of the witnesses that they have not read S-1606. Several admitted that their statements were prepared for them. Even the Great La Guardia and the spokesman for the Independent Citizens Committee for the Arts, Sciences and Professions, none other than the one and only Honest Harold Ickes, so admitted this slight error of not even reading the bill. S-1606.

An interesting observation was brought on by Mr. La Guardia to the effect that before a payroll tax be put into effect for the purpose of Health Insurance, that medical service and facilities be made available *first.* In other words, only those states offering the necessary service be permitted to tax its citizens for health benefits.

Dr. Allan M. Butler, Chief of the Children's Medical Service, Massachusetts General Hospital, devoted a considerable portion of talk describing what he believes to be a cause of the delayed improvement in medical care and its distribution, namely, the reactionaries in control of A.M.A. policy.

Speaking about the N.P.C.'s activities, he said their publicity on this subject was "intellectually dishonest, that the propaganda has not helped the cause of medicine."

Both La Guardia and Dr. Butler bitterly criticized the attitude of "one who pretends to speak for organized medicine, Morris Fishbein." La Guardia said Fishbein was "neither Fish nor Bien."

Many in the audience seemed to enjoy the hearings since it could be easily proved that the majority were



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federal employes from agencies having to do with health problems. Daily one sees the same faces. Uncle Sam is a generous employer since he permits his employes this monthly vacation in addition to their regular vacation.

Representatives of two church groups appeared before the committee endorsing compulsory Health Insurance.

The Reverend Jack R. McMichael, New York, Executive of the Methodist Federation for Social Service, admitted he had studied the bill and the cross-examination would show that he had.

The Reverend Francis E. McPeek, representing the Congregational Christian Churches, also testified favorably. Both men are very young. One would think to hear their testimony that they represented the Youth Movement Group. Rev. McPeek admitted he had not read the bill. Hearings are expected to continue into May.—Washington Letter, UPHL, April 15, 1946.

* * *

On May 6, Father McGowan of the National Catholic Welfare Conference submitted a statement from which we have taken the following excerpts:

"The group we represent has long manifested interest in a general health program. The Bishops' Program of Social Reconstruction, issued twenty-seven years ago, just after World War I, urged social security not only against unemployment and old age but against sickness and disability.

"In order that any national health program can become effective the following requirements are essential:

"(a) There must be an extension of hospital facilities by means of government support or subsidy for hospital construction, particularly in the areas sparsely settled and in the areas of low per capita income. There can be no extension of services without facilities to implement the program. This proposal is now under consideration by Congress.

"(b) There must be a notable extension of *Public* Health Centers for the prevention of illness. . . .

"(c) There must be provision for adequate medical and nursing services in areas where such services are now insufficient. . . .

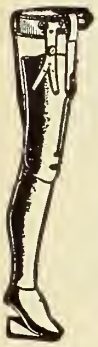
"(d) There should be federal support or subsidy to the states on a matching basis to provide care for the medically dependent who are entitled to 'Public Assistance.' . . .

"(e) There should be subsidies granted by the Federal government to qualified colleges and universities for medical research.

"We favor the establishment of a National Health Program which will provide both hospital and medical care for the citizens of our country. We recognize that the voluntary systems of health insurance which have rendered excellent service to our people would require some form of government aid to achieve universal health security. We favor in consequence a national system of insurance supplemented by government tax revenues by means of which all citizens can be protected in matters of health; but *we consider that this bill as presently drafted is unsatisfactory because of the complicated methods of administration which it creates* and because of the excessive government control over the health services which are to be provided."

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Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

PHYSIOTHERAPY. By Thomas Francis Hennesey, M.D., Dean and Director, Massachusetts School of Physiotherapy, Boston: Bellman Publishing Company, Inc., 1946. Price, $0.75.

This is number 65 of a group of seventy-five vocational and professional monographs used in connection with guidance activities in general counseling regarding selection of a career. The objective is to outline the personal qualifications required in engaging in a career, the scholastic training needed, an analysis of employment opportunities, chances for advancement, and remuneration. These and other types of information needed in selecting a vocation are given in sufficient detail.

GELATIN IN NUTRITION AND MEDICINE. By N. R. Gotthoffer, Director of Research, Grayslake Gelatin Co., Grayslake, Illinois. Free to medical profession and research workers.

Gelatin as a food and as a substitute for protein, and its important feedings are discussed; also its physiological effects, in the management of peptic ulcers, and various other services, and as a plasma substitute. On page 124 is a quotation, by permission, from THE JOURNAL MSMS, Vol. 43, page 219, 1944, a paper by L. A. Schwartz, M.D.

A BLIND HOG'S ACORNS. Vignettes of the Maladies of Workers by Carey P. McCord, M.D. With illustrations by Strobel. Chicago and New York: Cloud, Inc., 1946. Price, $2.50.

Dr. McCord, a Michigan doctor, has written a very interesting and entertaining story of his adventures in industrial medicine. He tells of the study of jungle ulcer in the land of the Mayas, of patch tests for causes of infections occurring in workers in certain industries. He tells of the search for the cause of a group of symptoms, sneezing, coughing, prostration, and fainting, coming on at certain hours each day, and its being traced to the dumping of waste in a nearby abandoned sewer by a neighboring tannery when it closed at four o'clock. The book is full of stories that will delight the interested reader. There is nothing technical, so the layman can enjoy the book as well as the industrial physician. Dr. McCord has rendered a service by showing the humor and adventure that one may find in his daily tasks, if so inclined.

QUARTERLY REVIEW OF PSYCHIATRY AND NEUROLOGY. Volume 1, Number 1. January, 1946.

Winfred Overholser, M.D., is editor of this newest review of medical literature. Comprehensive abstracts are given of articles occurring on certain subjects in the field of neurology and psychiatry. The reviews are good, short, and references given. The review is in the form of a journal, with a subscription price of $9.00 per year. Published by the Washington Institute of Medicine, 1720 M. Street, Washington 6, D. C.

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THE 1945 YEAR BOOK OF INDUSTRIAL AND ORTHOPEDIC SURGERY. By Charles F. Painter, M.D., Orthopedic Surgeon to the Massachusetts Women's Hospital and Beth Israel Hospital, Boston. Chicago: The Year Book Publishers, Incorporated, 1945. Price $3.00.

This book of 420 pages is a concise résumé of the advances in the fields of Orthopaedic and Industrial Surgery during the past year. It is comprehensive in its scope and is exceptionally well illustrated throughout. Newer techniques and methods are well described in a most understandable manner and several of the new devices recently introduced, are adequately discussed. This is a valuable reference for the general practitioner and the specialist as well, and anyone will find it a valuable and popular addition to his library. —P.C.K.

JOURNAL OF THE HISTORY OF MEDICINE AND ALLIED SCIENCES. January, 1946. Volume 1, Number 1. New York: Published Quarterly. Henry Schuman. Price $7.50 in U. S., Canada, and Latin America; $8.50 elsewhere. Single copies $2.50.

A new journal makes its appearance in an attractive paper-bound volume of 194 pages, well printed on non-gloss paper. It contains several original articles challenging to the historian. The first tells of the animal influence on the anatomy of Vesalius, the organs being simian instead of human. Pharmacopoeias are shown in their relation to history of the world. The influence of new rulers, new life and customs are shown in the texts of the pharmacopoeias. There is an interesting paper on the medical education of the 17th century in England.

The journal, as it develops, will be a source of much interesting material, and an outlet to the student who is gifted in research.

NUTRITION AND CHEMICAL GROWTH IN CHILDHOOD. Volume II, Original Data. By Icie G. Macy, Ph.D., Sc.D., Director of the Research Laboratory, Children's Fund of Michigan, Past President, American Institute of Nutrition; Member of the Food and Nutrition Board of the National Research Council; Consultant for Nutrition to the Pediatric Staff of the Children's Hospital of Michigan; Honorary member of the Society for Pediatric Research; Member of the American Society of Biological Chemists and the Society for Research in Child Development. With a Foreword by Lawrence Reynolds, M.D., Editor of the American Journal of Roentgenology and Radium Therapy and a supplement by Julia Outhouse Holmes, Ph.D. Presenting data collected in the Department of Home Economics, Agricultural Experiment Station, College of Agriculture, University of Illinois. Springfield, Illinois: Charles C. Thomas, Publisher, 1946. Price $10.00.

Volume two of this series is on Original Data. The first volume contains studies and reports of the growth and development of the human being. This volume makes detailed studies of the information thus obtained and is presented in tables and pictures, x-rays of growth studies, et cetera.

Twenty-one children were studied in detail. Ten healthy children and four adults lived together eight months while undergoing studies. Foods were analyzed, vitamins, weather; complete medical histories, growth details, et cetera, are given for these children. Donald, for instance, starts at 57 months and goes to 183 months: anthropometric measurements, height, weight, skeletal maturation, food intake, blood determinations, x-ray of hands, jaws, joints, feet; emotional reaction, minerals in intake, urine, feces; nitrogen, complex carbohydrates in intake and feces; pedometer measurements, temperature and pulse. Roentgen progress of meals through gastro-intestinal tract, 98 pages for Donald. Herbert, Jimmy, Barbara, Billy, Bobby, Frank, Phyllis, Betty, Jean, Charldine get approximately similar studies. Several others are



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GASTROSCOPY AND GASTROENTEROLOGY—Two-week personal course, June 3.

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also included in minor studies. This is sponsored by the Children's Fund of Michigan and makes a monumental original study, most interesting to doctors treating children and young, growing people.

HAROFE HAIVRI (The Hebrew Medical Journal). Volume 2, 1945. A semi-annual bilingual publication edited by Dr. Moses Einhorn.

The contents of this journal are not confined to technical medical topics, but are divided into several sections covering a variety of related subjects, such as Medicine in the Bible and Talmud, Old Hebrew Medical Manuscripts, Palestine and Health, et cetera. In the medical section the following subjects are discussed: "The Treatment of Heart Failure" by Harry Gold, M.D., "The Anemias and Their Treatment in the Light of Recent Advances" by Gershon Ginzburg, M.D., and "The Child and His Mental Health" by Samuel J. Lipnitzsky, M.D.

Under the topic of Historical Medicine, Prof. Nahum Slushtz of Palestine writes an interesting article on Isaac Ben A'mran, famous physican and philosopher, who lived in Keiruhan in the middle of the 18th century and served as court physician to the Emir of Zaduth Alla.

GASTRO-ENTEROLOGY. By Henry L. Bockus, M.D., Professor of Gastro-enterology, University of Pennsylvania Graduate School of Medicine. In three volumes, totaling about 2,700 pages with about 900 illustrations, many in colors. Volume III—"The Liver, Biliary Tract and Pancreas, and Secondary Gastro-intestinal Disorders." 1091 pages with 427 illustrations, some in colors. Philadelphia and London: W. B. Saunders Co., 1946. Price—3 volumes and separate desk index, $35.00.

Volume III of this great text has been delayed but meets the high standards of the other two. Fourteen members of the Faculty of the University of Pennsylvania are contributors, making this an exposition of the knowledge and teachings of that University. About a third of the book is devoted to the liver. A section treats of the gall bladder and bile tracts, another of the pancreas. A chapter treats of diseases of the spleen and another on food poisoning. This set of books is most complete, a work of art and authority. It will grace the doctor's library and will stimulate to further study.

SYNOPSIS OF PHYSIOLOGY. By Rolland J. Main, Ph.D., Professor of Physiology, Medical College of Virginia, Richmond. Illustrated. St. Louis: The C. V. Mosby Co., 1946. Price $3.50.

This book is intended as a review for student and doctor. Each subject is discussed briefly but clearly and so as to review and stimulate one's memory. The book is pocket size and would be handy to use. There are several good illustrations and a good index.

AMBULATORY PROCTOLOGY. By Alfred J. Cantor, M.D., Associate Proctologist, Kew Gardens General Hospital, Long Island, New York; formerly Assistant Attending Gastro-enterologist, Queens General Hospital, and Assistant Adjunct Proctologist, Hospital for Joint Diseases, New York. With a Foreword by Beaumont S. Cornell, M.D., Editor, American Journal of Digestive Diseases. New York and London: Paul B. Hoeber, Inc., 1946. Price $8.00.

After an adequate discussion of the clinical anatomy of the anus, rectum, and sigmoid, the author describes his methods of diagnoses, anesthesia, pre and post operative care which can be used for the congenital anomalies

Say you saw it in the Journal of the Michigan State Medical Society

which must be considered, and in addition emphasizes the pathology most frequently found before puberty.

The chapters on fistula, infections, ulcer and hemorrhoids are complete and well illustrated. Whether or not such procedures as hemorrhoidectomy and relief of prolapse and procidentia should be included as ambulatory proctology seems questionable.

The methods described seem more in line with hospital procedure. The author's consideration of colitis, venereal diseases and intestinal parasites is adequate. Less common conditions and specific operative technique are also included.

The book is sufficiently detailed to give the general practitioner good advice.

MICHIGAN'S DEPARTMENT OF HEALTH

(Continued from Page 656)

INCIDENCE OF COMMUNICABLE DISEASE

Disease	*March 1946*	*March 1945*	*7 year median*
Diphtheria	44	75	25
Gonorrhea	1083	951	761
Lobar Pneumonia	68	97	304
Measles	13527	336	1490
Meningococcic Meningitis	21	37	10
Pertussis	466	456	743
Poliomyelitis	2	0	0
Scarlet Fever	689	1414	1347
Syphilis	1478	1378	1338
Tuberculosis	438	631	498
Typhoid fever	5	0	5
Undulant fever	10	12	9
Smallpox	0	2	2

DIPHTHERIA IN MICHIGAN

A breakdown of cases of diphtheria in Michigan by age groups, 1945, follows. The large number of cases occurring in school-age children indicates the importance of "booster" doses of toxoid for all children just prior to their entering school.

Age	*Cases*
Under 1	9
1 - 4	134
5 - 9	163
10-14	72
15-19	55
20-24	35
25-29	44
30-34	21
35-39	14
40-44	19
45-49	13
50-54	15
55-59	12
60-64	6
65-69	5
70-74	3
75	1
Unknown	9
Total	630

Socialized Medicine and the D.A.R.

The D.A.R. of Illinois in Convention March 19, 1946, in Chicago voted against "Socialized Medicine." This is a second action by this same body affirming their opposition to "legislation for the socialization of Medicine."

* * *

YWCA

The national YWCA, in convention at Atlantic City, March 14, 1946, passed a resolution endorsing the Wagner-Murray-Dingell Bill.



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BRITISH HEALTH PLAN ABOLISHES DOCTORS' BILLS

(Continued from Page 594)

This body will refuse permission if it decides there are already enough public service doctors in the area.

May Pay for Privacy

To entice doctors into areas where there are too few the government will set the rate of pay higher.

The bill provides for refresher courses at universities and medical schools, with the ministry of health footing the bills.

All hospitals except so-called "teaching hospitals" will come under the administration of regional hospital boards appointed by Bevan. Teaching hospitals will collaborate with the ministry and regional boards in administering smaller hospitals. All specialists will be attached to hospital staffs.

All services will be free to patients, including the attention of specialists. However, wealthy persons may buy extra privacy by paying extra.

Special eye clinics will be established and the entire service, including glasses, will be free. All necessary medical appliances, drugs, and medications will be free.

Dr. Josiah J. Moore, treasurer of the American Medical Association and past president of the Chicago Medical Society, predicted the annual cost of the British plan will probably exceed by several times the 600 million dollar estimate of its sponsors.

Hospitals Seen Endangered

Socialized medicine, he pointed out, has failed in every country where it has been attempted to date and if applied to the United States would mean the lowering in quality of medical care by discouraging qualified candidates from entering the medical profession and socializing all medical schools and nonprofit hospitals.

The latter institutions, he said, if they were to become government facilities, constantly would be under fire in the same manner that continuing complaints now are being registered against most public institutions devoted to care of the sick.

HERE AND THERE

The term "political medicine" seems to be making some headway in supplanting the term "socialized medicine." It is evident that "political medicine" is more apt in describing the compulsory health insurance features of the Wagner-Murray-Dingell Bill than does "socialized medicine."—*News Letter,* Council on Medical Service and Public Relations, A.M.A.

(Incidentally, we have been dubbing this topic "political medicine" for many months, and have devoted a section of THE JOURNAL to POLITICAL MEDICINE. We are glad to see it is spreading.)

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ARE STAMPS A MENACE?

1. The gum on U. S. Postage stamps contains no germicidal properties. However, it has slight bacteriostatic properties, at least for the staphylococcus albus.

2. The staphylococcus albus, a common inhabitant of the nose and throat, can withstand drying for long periods of time. A growth of this organism was obtained from stamps (Japanese issue) and from recently issued American stamps.

3. Tubercle bacilli were not cultured from stamps licked by patients known to have active pulmonary tuberculosis. Previous sputum tests of these patients showed as many as one hundred tubercle bacilli per microscopic field. Stained smears of the centrifuged sediment obtained from the back of each stamp also failed to show acid-fast bacilli.

4. All cultures for other organisms, both aerobic and anaerobic, as well as for diphtheria bacilli were negative.

5. There is little danger of the common use of postage stamps playing an important role in transmitting infectious diseases.—*Virginia Medical Monthly,* 73:61, (Feb.) 1946.

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R. D. 3, Stroudsburg, Pa.
616 G. Daniel Baldwin Bldg., Erie, Pa.

ORIGIN OF THE NAME "CESAREAN"

Palmer Findley, in his Priests of Lucina, says that "so far as the records show, the cesarean operation was not performed on the living woman in the time of Julius Caesar. This fact should effectually dispose of the popular belief that the name of the operation was derived from the alleged manner of birth of Julius Caesar. It is the consensus that the name was derived from the lex regia, in which it was ordered that an abdominal section must be performed on all dead and dying women when in the advanced state of pregnancy. Later, the lex regia became known as the lex cesaria and from this law the name cesarean was derived."

The earliest authenticated cesarean on a living woman was performed in 1500 by Jacob Nufer, a butcher who specialized in the gelding of sows. In Bauhin's account of the event (Fr. Rousset, Basle, 1588) at Sigerhausen it is recorded that he "locked the door, offered prayer, placed his wife on the table and cut her abdomen open. The cut was so skillfully done that the child was removed at once without injury. . . . Later his wife gave birth to twins, and gave birth four times more. The child which was cut from her body lived seventy-seven years."

The Julius Caesar legend does not hold up in the light of the historic facts.—*Medical Times,* 74:2, 45 (February), 1946; *Journal Lancet,* (March) 1946.


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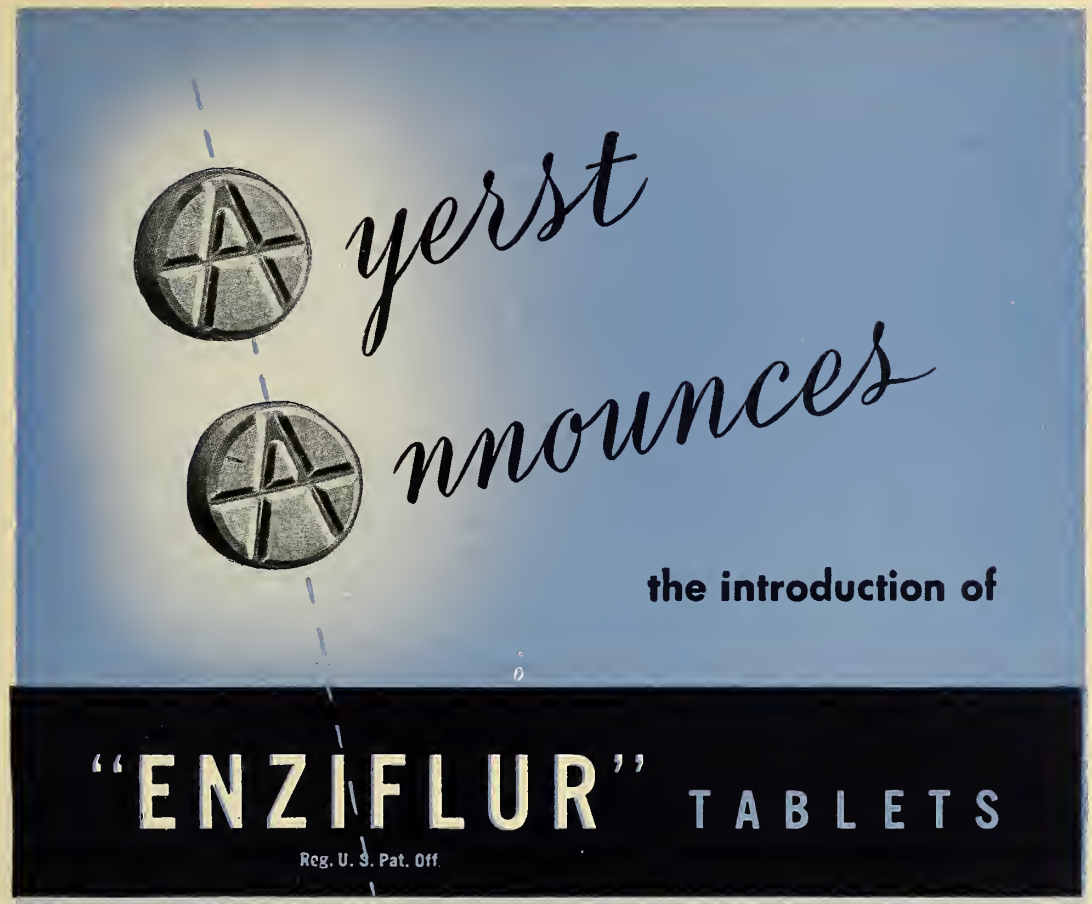
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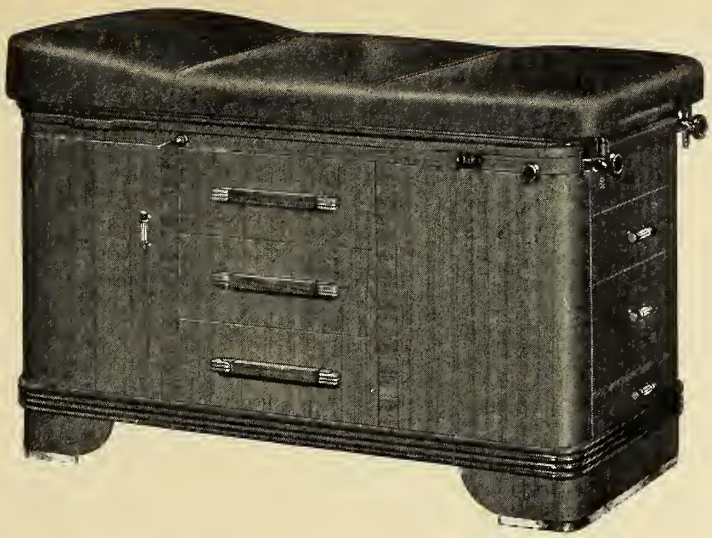
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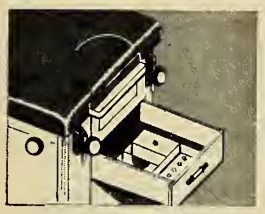
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These six time-saving features of Hamilton Nu-Tone Tables give you extra time in which to see more patients. And your patients get extra comfort and safety on the big, oversize, 25" wide top . . . plus an excellent first impression of your office and you, as a result of the dignified, massive beauty of the Nu-Tone Table. It is equipment you will be proud to own. Ask for more information about it.

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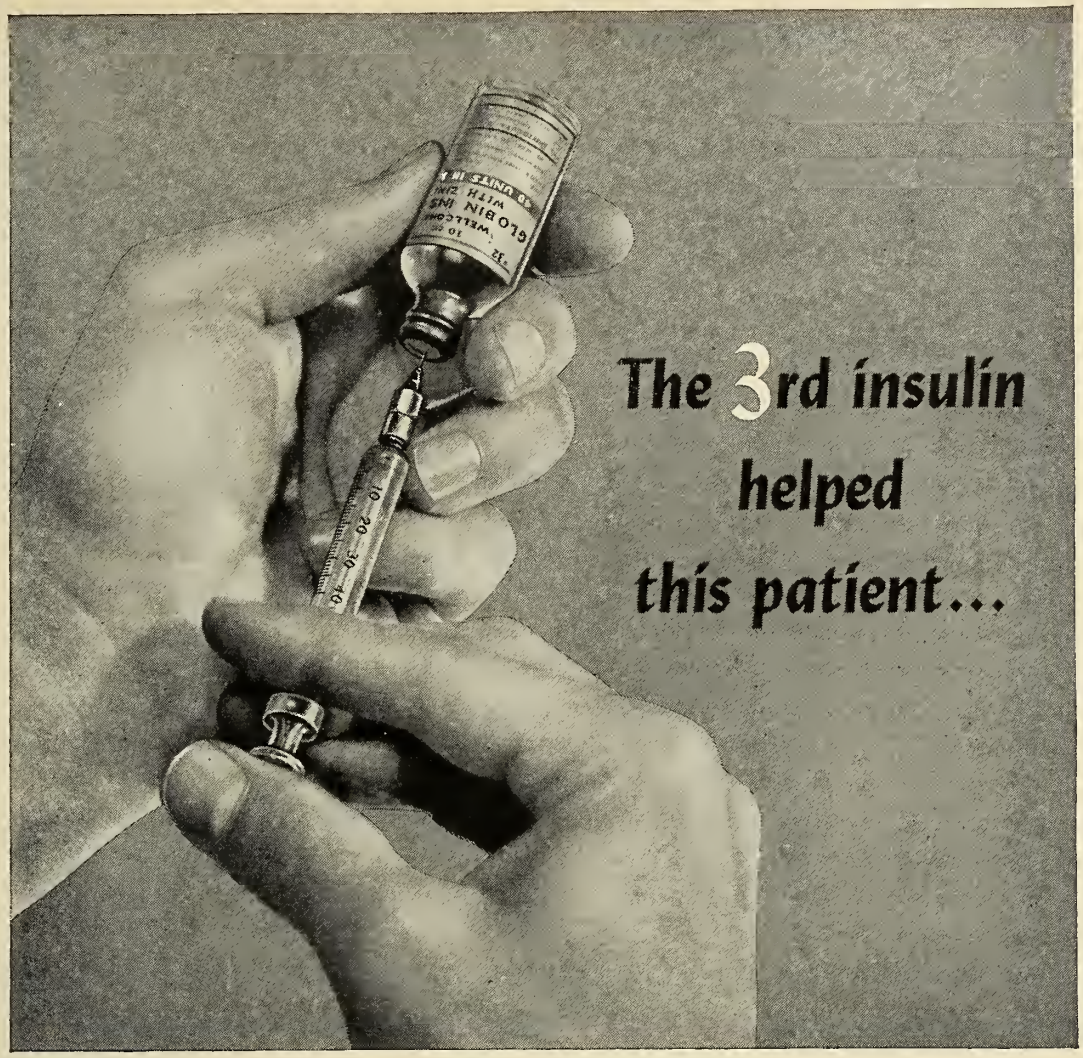
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TODAY, the physician treating diabetics, has the choice of three types of insulin. One insulin is rapid-acting but short-lived. Another is slow-acting but prolonged. Between them is the new 'Wellcome' Globin Insulin with Zinc, moderately prompt in starting, yet capable of sustained effect *for sixteen or more hours.* Such intermediate action is sufficient to cover the periods of maximum carbohydrate intake, and diminished enough by nighttime to minimize the likelihood of nocturnal reactions. Physicians do well to consider all *three* insulins when treating their diabetic patients.

'Wellcome' Globin Insulin with Zinc is a clear solution, comparable to regular insulin in its freedom from allergenic properties.

Accepted by the Council on Pharmacy and Chemistry, American Medical Association. Developed in the Wellcome Research Laboratories, Tuckahoe, New York. U.S. Patent No. 2,161,198.

Available in vials of 10 cc., 80 units in 1 cc., and vials of 10 cc., 40 units in 1 cc. Literature on request. *'Wellcome' Trademark Registered.*

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You and Your Business

UNIFORM FEE SCHEDULE ADOPTED BY STATE VETERANS AFFAIRS OFFICE

The Office of Veterans Affairs, State of Michigan, has adopted the Uniform Fee Schedule for Governmental Agencies, as of May 13, 1946.

Major A. D. Alguire, State Office of Veterans Affairs Service Officer, stated that the decision to adopt the Uniform Fee Schedule was motivated by a desire to "cut red tape and speed up treatment." The State Office cares for non-service connected emergency cases.

Major Alguire praised the work being done by physicians for the State Office of Veterans Affairs and for the Veterans Administration. He declared that local "home-town" care of ex-service men has taken the pressure away from the Veterans Administration hospital at Dearborn, where all veterans previously were required to go for treatment for their service-connected disabilities.

V.A. HOSPITALIZATION FOR WOMEN VETERANS

Thomas P. Crane, M.D., Chief Medical Officer of the Veterans Administration, Detroit office, advises that women veterans are entitled to receive emergency hospitalization at government expense in local contract hospital *for service and non-service connected disabilities.*

Dr. Crane states that under existing regulations, where no government facilities are available, veterans may be so hospitalized at government expense locally if prior authority is obtained from the Veterans Administration office.

MALPRACTICE CASES ARE ON THE RISE

Every physician should be protected against claims of malpractice. A number of recently discharged medical veterans may not have reinstated their civilian malpractice insurance, despite the fact they have returned to private practice. Reports indicate that a number of malpractice cases recently have been started against Michigan physicians who unfortunately had no insurance coverage. Check your insurance and make certain that you are fully protected against the troublesome claims and activities of chronically dissatisfied persons.

AUTHORIZATION NECESSARY

Service to veterans, under the Michigan Plan and the agreement with the Veterans Administration and the State Office of Veterans' Affairs should not be rendered by doctors of medicine without a *written authorization* from these governmental agencies, or Michigan Medical Service. No compensation will be paid by the V.A. or the State Office of Veterans Affiairs to physicians who render service without authorization.

The V.A. authorization includes instructions on the type of service to be given. This is indicated by the code number appearing opposite the service as listed in the Uniform Fee Schedule for Governmental Agencies. Look for the code number and perform the services indicated by said code number in the Uniform Fee Schedule. Be sure you get authorization to perform the service. Be sure you check the service to be given as indicated by the code number on the authorization.

(Turn to Page 718)

VETERANS ADMINISTRATION PARTICIPATION BLANK

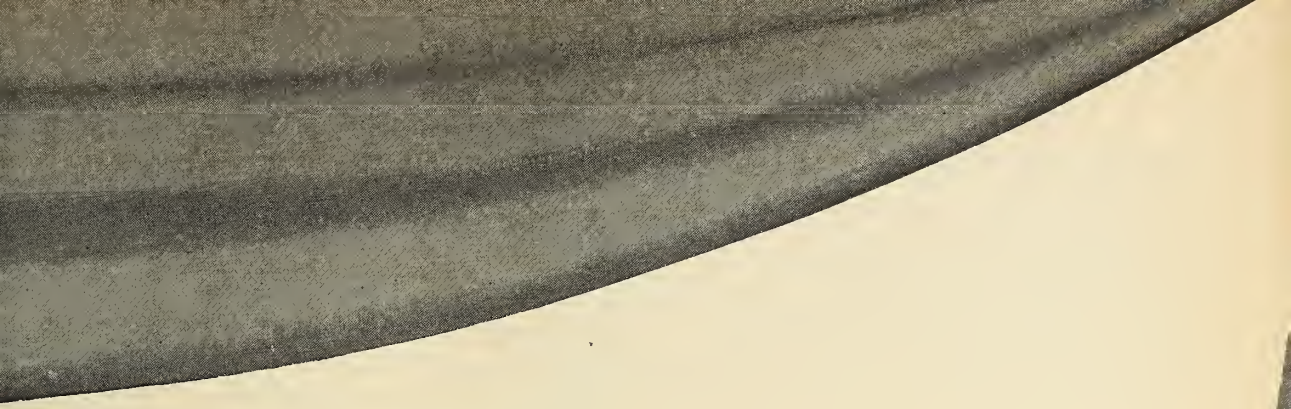
All MSMS members are urged to become participating physicians under the V.A. plan, since veterans are being told to seek medical care from their own doctors. If you have not already done so, execute the participation blank printed below and rush to Secretary L. Fernald Foster, M.D., 2020 Olds Tower, Lansing 8.

Please file my acceptance of appointment as a fee-designated physician under the plan for veterans' care outlined in your Secretary's Letter No. 98 dated December 26, 1945.

(Signed) ..... M.D.

Street .....

Date ..... City .....



RTRON IS *Distinctive*

Ertron is distinctive—therapeutically nd chemically—from any other drug sed today in the treatment of chronic rthritis.

Ten years of *intensive clinical research* ı universities, hospitals and private ractice has established the efficacy of rtron in the management of arthritis.

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Simply stated Ertron is electrically ctivated vaporized ergosterol pre- ared by the Whittier Process. Each ıpsule contains 5 mg. of activation- roducts having a potency of not less ıan 50,000 U.S.P. Units of Vitamin D.

Ertron contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure chemical form further establish the chemical as well as the therapeutic uniqueness of Ertron.

Physician control of the arthritic patient is essential for optimum effect. To Ertronize employ Ertron in adequate daily dosage over a sufficiently long period to produce beneficial results. If signs of overdosage appear, discontinue medication for about ten days—then continue with three capsules per day gradually building up to the patient's optimum level.

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PARENTERAL FOR SUPPLEMENTARY INTRAMUSCULAR INJECTION

Ertron is the registered trade-mark of Nutrition Research Laboratories

Ethically promoted

UTRITION RESEARCH LABORATORIES · CHICAGO

(Continued from Page 714)

COLLIER'S PRAISES MICHIGAN PLAN

Collier's of May 11 contained an excellent article entitled "The Doctors Run the Show," written by Bill Davidson, which explained the "revolutionary new Michigan Plan in giving veterans not only the best medical treatment in the world—but a plan that may well be the answer to free enterprise in state medicine."

The eight steps, graphically illustrated in Collier's double spread article on Michigan's plan, indicated the following steps:

1. Ailing Michigan Veteran asks Veterans Administration local office for treatment of service-connected injury.
2. Veterans Administration quickly checks vet's claim, mails authorization to Michigan Medical Service.
3. Michigan Medical Service sends its own treatment form to ailing veteran.
4. Veteran takes treatment form to family doctor who fills it out after visit.
5. Doctor returns treatment form to Michigan Medical Service.
6. Michigan Medical Service pays doctor according to fixed standard of fees.
7. Michigan Medical Service bills Veterans Administration monthly for money paid to doctors.
8. Advantages: fast, simple, cuts red tape, preserves doctor-patient relationship.

ATHLETIC ACCIDENT BENEFIT PLAN OF THE MICHIGAN HIGH SCHOOL ATHLETIC ASSOCIATION

Do you know that this plan has 22,093 high school students registered in 508 out of a possible 700 high schools of Michigan, and that approximately $30,000 has been paid to member schools for allowed scheduled injuries in connection with athletic activities?

A better understanding as far as the athletic and physical education program are concerned, and the injuries that occur in connection with them, is indicated on the part of physicians generally. The Athletic Accident Benefit Plan is handled by a five-man committee. These schoolmen, who desire to be of assistance to the medical profession, will be glad to explain the plan to county medical societies where invited.

FIELD ARMY OF AMERICAN CANCER SOCIETY

The Cancer Control Committee of the Michigan State Medical Society recommends aid and support from county medical society memberships to the representatives of the Field Army of the American Cancer Society when they appear in the various counties for organizational work. With the reorganization of the American Cancer Society within the last few months, Wm. A. Hyland, M.D., Grand Rapids, Chairman of the MSMS Cancer Control Committee, urges full co-operation by county societies with the Field Army.

MICHIGAN'S HEALTH FOUNDATION

The Michigan State Medical Society is sponsor of the Michigan Foundation for Medical and Health Education, Inc. A progress report on the Foundation's activities is presented in this number in the annual report of President Earl I. Carr, M.D., Lansing (see Page 730).

The Foundation's assets are well over $100,000 but the goal of $150,000—to be reached by September 25, 1946—is necessary to meet the conditions laid down by Past President A. S. Brunk, M.D., Detroit, who gave stimulus to many contributions to the Foundation by offering to contribute $1,000 if an additional $99,000 were contributed in the year beginning September, 1945. Fifty-seven per cent of the necessary amount has already been contributed or pledged.

Have you contributed to the Michigan Foundation for Medical and Health Education, or contacted someone financially able and willing to aid Michigan's Health Foundation? For your convenience, a pledge card is printed on Page 732.

BRITISH DOCTORS' SALARY SCALE FIXED

London—A Government-sponsored investigating committee recommended that all doctors who enter Britain's proposed nation-wide state health service should receive an average salary of $5,200 net (after taxes).

The pay would range from $2,000 a year for assistants to $8,000 or above for at least nine per cent of the general practitioners.—*The Detroit Free Press* May, 10, 1946.

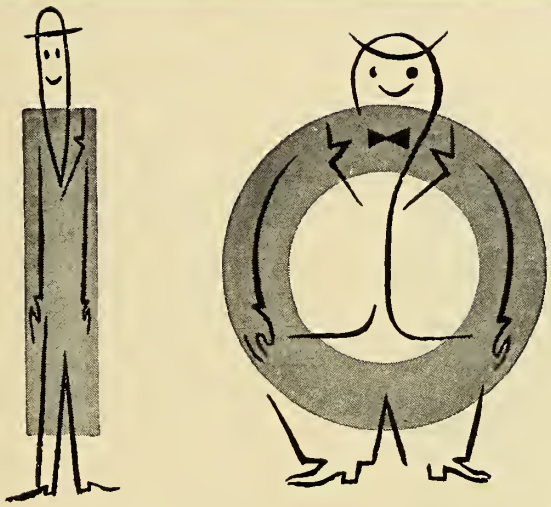
THE DOCTORS RUN THE SHOW

Such is the title of an extremely well written article in the May 11, 1946 number of *Collier's*. It is illustrated in color and tells of "The revolutionary new Michiga

(Continued on Page 720)



a common denominator for all restricted diets



All restricted diets must have one thing in common—vitamin adequacy—lest the patient's quest be thwarted by deficiency. Almost all restricted therapeutic diets have been found deficient in one or more of the essential vitamins. Supplementation is therefore mandatory in diets prescribed for obesity, allergies, peptic ulcer, and diabetes.[1] Easy to remember, easy to take, Upjohn vitamin preparations are potent, low cost aids in maintaining optimal vitamin intake during dietotherapy.

1. Handbook of Nutrition, Chicago A.M.A., 1943, p. 557.

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FINE PHARMACEUTICALS SINCE 1886

UPJOHN VITAMINS

Say you saw it in the Journal of the Michigan State Medical Society

THE DOCTORS RUN THE SHOW

(Continued from Page 718)

Plan is not only giving veterans the best medical treatment in the world—it may well be the answer to free enterprise in state medicine." The article pictures the tribulations of a veteran trying to get treatment during the regime before Michigan Medical Service came into the picture, when a Detroit veteran had to start at 4:00 a.m. to be at the hospital at 8:00, got his treatment at 11:00 then reverse his tortuous route back home. Now he gets an order, goes to his own home doctor, gets treated like any other patient, and is happy.

Bill Davidson, *Collier's* special reporter, has given the doctors a grand boost and every doctor should read it.

DETROIT CITY EMPLOYES CHOOSE MMS

Michigan Medical Service, the medical care plan sponsored by the Michigan State Medical Society, was chosen to provide surgical service to Detroit city employes as the result of City Council action which authorizes the city to pay part of the costs of surgical and hospital care for its employes.

The city program includes both surgical and hospital care, with Michigan Hospital Service, companion Blue Cross organization to Michigan Medical Service, providing the hospital service. Detroit becomes the first large city in the country to enroll its employes in the Blue Cross and pay part of the cost. It is the 66th Michigan city to provide for Blue Cross enrollment of municipal employes.

Fifteen insurance companies submitted proposals to the Council and the Blue Cross program was selected after all proposals had received careful consideration by the committee appointed by the Council.

Half of the costs of the hospital-surgical care program will be paid by the city for approximately 14,000 employes. Authorization to share financially in the program was given City Council at an election in Detroit last November when voters by a substantial majority passed an amendment for a surgical-hospital care plan for city employes.

FIFTY-YEAR GRADUATES HONORED BY MEDICAL COLLEGE ALUMNI

Golden anniversary graduates of Wayne University's College of Medicine were honored with special diplomas and life memberships in the College's Alumni Association at the banquet in the Hotel Statler climaxing the Association's 60th annual Clinic Day on Wednesday, May 15.

There was a morning and afternoon program in the College of Medicine auditorium with addresses by specialists in different medical fields. In the evening, besides the golden anniversary ceremony, there were talks by Dr. Irvin W. Sander, retiring president, and Dr. George C. Burr, president-elect, of the Association. An address by W. C. C. Cole, colonel, and executive officer of the 36th General Hospital, Wayne University unit that served overseas, on the hospital's history, concluded the program.

RANT AND RAVE

The following is quoted from *Detroit Medical News*, April 22, 1946:

We note that two Congressmen from Michigan, Representatives Shafer and Hoffman, favored making osteopaths eligible for appointment to posts in the Veterans Administration.

(Ed. Note: Editor Haughey of the Journal of the MSMS please note.)

Editor Haughey has noted. He regrets that these two congressmen, and others, are apparently in favor of putting cultists in the Veterans Administration. He regrets that the problem of cultists has not been solved. He inherited it along with Editor Harm.

MILITARY SURGEONS TO MEET IN DETROIT

The next annual meeting of the Military Surgeons will be held in Detroit, October 9-10, 1946. The chairman, Dr. Carleton Fox, announced that Surgeon General Kirk, U. S. Army; Surgeon General McIntyre, U. S. Navy, and Surgeon General Hawley of the Veterans Administration have accepted invitations to be present at the convention. Also the list of commercial exhibits is almost complete and applications for scientific exhibits space are coming in rapidly.

The general program will be devoted to the general subjects of neuropsychiatry, tropical diseases and veterans rehabilitation of war injuries, including plastic surgery, and the dental subjects of the use of tantalum implants and maxillofacial reconstruction. There also will be sectional round table discussions in the fields of the specialty branches and the co-ordinating departments of the military and public health services.

Hotel space for visitors is being arranged and, while Detroit is like most cities at the present time, it is felt that those who make early reservations can be well taken care of. Reservations for hotel accommodations should be sent to Colonel Burt R. Shurley, 1005 Stroh Bldg., Detroit 26, Michigan.

GOP PRESENTS HEALTH MEASURE

WASHINGTON—(AP)—A Republican counterproposal to the administration's national health insurance bill would allot $220,000,000 yearly to the states to improve medical and dental care.

Senators Taft (Ohio), Ball (Minn.) and Smith (N. J.) joined in offering the bill which they said "places the primary responsibility for the health of the people on the states and local governments."

"We believe that federal funds are necessary," they added in a statement, "but only to aid the lower-income groups of the population and furnish financial assistance to states and local governments to supplement the limited funds available for help."

The bill backed by President Truman and sponsored by Senators Wagner (D., N. Y.) and Murray (D., Mont.) contemplates creation of a national health fund from which the government would pay costs of medical care for "insured" persons.

Most of the population would be insured under what

(Continued on Page 722)

Reduced incidence of secondary post-tonsillectomy hemorrhage

"Preliminary study of the effects of routine post-operative use of sulfathiazole gum indicated a reduction in the incidence of secondary hemorrhage."†

White's
SULFATHIAZOLE GUM

...provides HIGH salivary concentration with LOW (negligible) systemic absorption

INDICATIONS: Local treatment of sulfonamide-susceptible infections of oropharyngeal areas; acute tonsillitis and pharyngitis—septic sore throat—infectious gingivitis and stomatitis—Vincent's infection. Also indicated in the prevention of local infection secondary to oral and pharyngeal surgery.

DOSAGE: One tablet chewed for one-half to one hour at intervals of one to four hours depending upon the severity of the condition. If preferred, several tablets—rather than a single tablet—may be chewed *successively* during each dosage period without significantly increasing the amount of sulfathiazole systemically absorbed.

Available in packages of 24 tablets, sanitaped, in slip-sleeve prescription boxes.

IMPORTANT: Please note that your patient requires your prescription to obtain this product from the pharmacist.

†*McGovern, F. H.: Prevention of Secondary Post-Tonsillectomy Hemorrhage with Sulfathiazole Gum, Arch. Otolaryn.:* 40:*196-197 (Sept.) 1944.*

"when the gum was chewed for one-half to one hour, the average salivary concentration of sulfathiazole was 70 mg. per hundred cubic centimeters. The blood sulfathiazole of children chewing 1 tablet for one-half hour for twelve daily doses showed a maximal concentration of 0.5 mg. per hundred cubic centimeters."†



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PHARMACEUTICAL MANUFACTURERS,
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GOP PRESENTS HEALTH MEASURE

(Continued from Page 720)

in effect would be an extension of social security. The health fund would be raised by a payroll tax. Senator Pepper (D., Fla.), one of the measure's backers, says a three per cent tax would do the job. The senate labor committee has held lengthy hearings on this bill.

The Taft-Ball-Smith measure would bring all federal health activities under a national health agency to be headed by a physician, preferably with Cabinet status.

It would provide $200,000,000 yearly to be distributed among the states for general medical service and $20,000,000 for dental service. To qualify for federal funds, states would be required to draft a plan whereby hospital and medical service would be made available to all persons unable to pay for them.

The states could use the money to pay premiums for participation in "voluntary health insurance" by persons unable to pay for the insurance themselves.

The three Republicans called their proposal "an American plan based on assistance to the needy, liberty to the individual and a free medical profession."

They said the Wagner-Murray Bill would require a vast federal administrative organization to "supervise and pay all the doctors in the United States."—*Battle Creek Enquirer News,* May 6, 1946.

DEPARTMENT OF CHILD WELFARE

H. R. 5960 by Mrs. Luce of Connecticut, April 1
A Bill to establish a Department of Children's Welfare
Referred to the Committee on Expenditures in the Executive Departments

Comments.—When introducing the bill Mrs. Luce said—"Among the many serious problems confronting us today, none is more vital to our future welfare as a nation than the mental, moral, and physical health of coming American generations." *** "Experience has shown that services for children can be best administered by local communities, provided they have the support of the Federal Government when, and as, that may be needed."

The bill would create an executive department to be known as the Department of Children's Welfare, administered by a Secretary of Children's Welfare appointed by the President. The Department would have jurisdiction over the activities of the Government relating to the health, educational opportunity, and welfare of children in the United States. It would take over functions, powers, and duties relating to children now vested in the Secretary of Labor and the Chief of the Children's Bureau. The Secretary would be authorized to administer those provisions of the Social Security Act pertaining to grants to States for aid to dependent children, and those provisions pertaining to services for crippled children, child welfare services, and maternal and child health services. The Secretary would also be authorized to administer the provisions of the Fair Labor Standards Act relating to child labor. Under this bill, the Children's Bureau would be abolished and all officers and employes of it would be transferred to the Department of Children's Welfare.

PASSANO FOUNDATION AWARD

Ernest W. Goodpasture, M.D., Professor of Pathology of Vanderbilt University, Nashville, Tenn., was awarded the 1946 Passano Foundation Award of $5,000, at Osler Hall, Medical and Chirurgical Faculty, Baltimore, on May 15, 1946.

The Foundation was established in 1944 by Williams and Wilkins Company, medical publishers, to aid in any way possible the advancement of medical research, especially that bearing promise of clinical application.

Dr. Emil Novak, Associate in Gynecology in the Johns Hopkins University Medical School; Dr. Nicholson J. Eastman, Professor of Obstetrics in the Johns Hopkins University Medical School; Dr. George W. Corner, Director of the Embryological Laboratory of the Carnegie Institution of Washington, represent the medical profession on the Board of Directors of The Foundation.

Dr. Goodpasture received the award for his original development of the method for propagation of viruses in pure culture by inoculation of chick embryos and for his outstanding contributions to advancement of knowledge of the cell-parasite relationship in bacterial and virus infection.

Prior to Dr. Goodpasture's development of the chick embryo method of propagation of viruses in pure culture, medical research was halted in attempts to study diseases caused by viruses because of the fact that viruses will not multiply in culture media as do bacteria. Therefore virus cultures could not be made available for research into the mechanism of their reactions.

As a result of Dr. Goodpasture's original discovery some ten years ago, our knowledge of virus diseases has been immeasurably advanced. New viruses have been identified, the mechanism of virus reactions in the host have been studied and means of protection against many virus diseases have been made possible. Vaccines against several diseases of both man and animal against which little if any protection existed before have now been developed. Defenses against such diseases as fowlpox, smallpox, yellow fever, influenza and typhus fever have been considerably advanced by chick embryo study methods.

PSYCHIATRY IN CRIME. DELINQUENCY REHABILITATION AND INDUSTRY

The problem of the returning veteran, his rehabilitation and readjustment to civilian life was a predominant theme of the four-day convention of the American Psychiatric Association, at Chicago's Palmer House on May 27.

Officials of the Veterans Administration and of the United States Public Health Service met in special sections with psychiatrists from all parts of the country to discuss their common responsibility in aiding the mental and physical "reconversion" of ex-service men.

The growing importance of psychiatry in industry was considered in a section dealing with the job relationships of "well" persons, in addition to those with mental illnesses and maladjusted workers.

Wartime advances in such diverse fields as brain surgery, shock treatment, drug addiction, behavior pro-

(Continued on Page 738)

Hot weather presents no problem when Lactogen is used for infant feeding . . . because



. . . when refrigeration is not available, each feeding may be prepared separately. The doctor can always advise the mother to prepare individual LACTOGEN feedings whenever the baby is ready for his bottle. Preparing each LACTOGEN feeding just before feeding time safeguards the baby against the danger of nutritional upsets caused by bacteriological changes in the formula.

EASY TO PRESCRIBE

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1 LEVEL TABLESPOON 40 CALORIES (APPROX.)	2 OUNCES	2 FLUID OUNCES 20 CALORIES PER OZ. (APPROX.)

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Ownership and Use of Roentgenograms

The American College of Radiology adopted the following statement of policy on February 1, 1946, for the guidance of radiologists and other physicians concerning the ownership and use of roentgenograms:

1. Roentgenograms should be used for the best interest of the patient.
2. The roentgenograms are the legal property of the radiologist or of the hospital in which they were made. It is advisable, but not necessary, to mark on each film the statement, "Property of Dr. John Doe." Such a mark is particularly desirable if the radiologist delivers the films to the referring physician instead of filing them in his office or hospital department.
3. It should be the policy of the radiologist to make the films available for inspection by the physician who referred the patient for x-ray examination, along with a copy of the report of the radiologist. The best results are undoubtedly secured when it is possible for the radiologist and the referring physician to confer personally when the latter views the films.
4. If the referring physician or if the patient in behalf of the referring physician wishes to take the films away from the office or the hospital, it should be clearly understood that the films are "loaned" and should be returned after the loan has served its purpose.
5. If the patient dismisses the referring physician and goes to another physician, the films and the report should be made as freely available to the second as to the first physician who originally referred the patient. It is desirable that the patient notify the first physician of the change, and it may be assumed that he has done so, but even if this notification has not been made, the obligation of the radiologist is unchanged. When the second physician wishes to examine the films, it is assumed that he is doing so at the request of the patient.
6. If the referring physician objects to the submission of the films to the second physician or to the giving to the latter a copy of the radiologist's report, the radiologist is obligated to do so in spite of this objection. If the referring physician has possession of the films and refuses to release them, the radiologist, whose legal property they are, has the right to take whatever action is necessary to get the films for the further benefit of the patient.
7. All films should be legibly and permanently marked so that the patient can be identified and the date on which they were taken can be determined. This is important because, under some conditions, a comparison of films just made with others made previously may be the crucial factor necessary to establish a diagnosis or to estimate the progress or regression of a disease.
8. When a medicolegal situation exists, the radiologist has a right to refuse to release the involved films if necessary for his own protection, except on a court order.
9. A liberal attitude regarding the release of films is more desirable than strict insistence on one's legal rights. It is better to run the occasional risk of losing films than to engender the enmity of a patient or of a physician by strict adherence to the rule, which in the past has led to attempts to make laws making the films the legal property of the patient.
10. In recognition of the universal importance of radiologic methods of examination, the principles regarding the use of roentgenograms outlined above are deemed by the American College of Radiology to be equally applicable to roentgenograms made by physicians other than specialists in radiology.

* * *

A NEW CABINET POST?

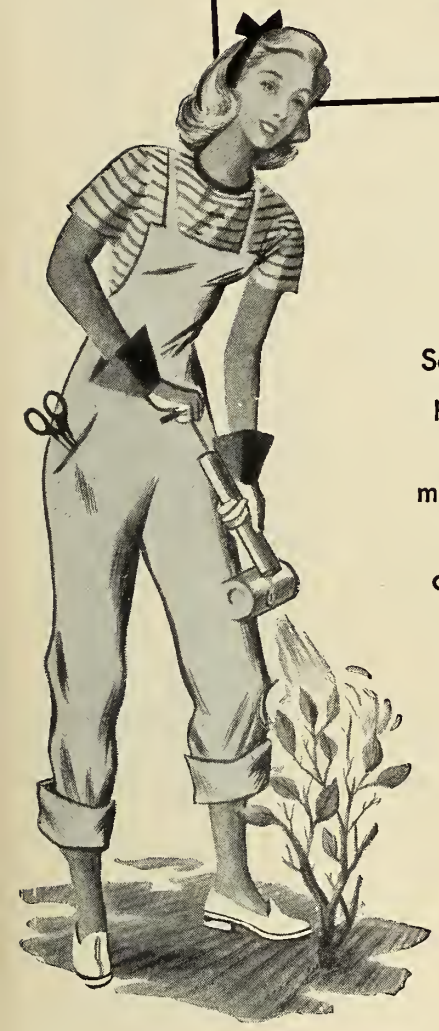
President Truman has made the first use of the powers conferred by the reorganization law to order merger of the government's numerous welfare activities, including the administration of social security, under the Federal Security Agency. Unless vetoed by Congress the merger becomes effective in sixty days. At the same time the President announced that he will ask Congress to give the agency full cabinet status.

The consolidation itself is desirable from the standpoint of efficient organization, the elimination of duplication and overlapping, and the centralization of the related activities under a single responsible executive. And the proposal to create a new cabinet post is a recognition of the scope, importance, and particularly, the permanence of this relatively new branch of federal activity.

One possible objection to this suggested elevation in rank for the welfare services of the federal government is that it could encourage a mushroom growth of these activities. Actually, however, the danger of such excessive expansion would seem to be lessened by this move. The agencies of government which are in greatest danger of getting out of hand are those with more or less independent status. By unifying them under a single head and departmental budget they would seem likely to receive closer scrutiny and supervision, both by the executive branch of government and by Congress, than under a looser administrative set-up.—*Battle Creek Enquirer-News,* May 20, 1946.

Do you have your hotel reservation for Detroit —September 25, 26, 27? See page 728, this issue, for details and application blank.

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Michigan Foundation for Medical and Health Education

President's Report*

We are greatly grieved by the death of Doctor Rollin H. Stevens, member of the Board of Trustees of this Foundation. A resolution has been prepared for action at this meeting and the vacancy should be filled today.

The present net worth of this corporation is shown in the balance sheet as aggregating $111,-152.05. This does not include accruals on bonds which will slightly increase this footing. You will note that we have by recapitulation:

Bonds held by or for this corporation	$50,666.28
Grace Biddle Estate (last inventory)	28,953.46
Cash	10,332.31
Pledges (by insurance, by bonds, or by cash)	21,200.00

Another recapitulation may be of interest. At the onset, the MSMS trust fund contained:

MSMS contribution	$10,000.00	
Biddle Estate & Other small contributions	42,473.07	$52,473.07

We have received, since our incorporation, the following denominations in pledges:

1	$10,000 (Mich. Medical Service)	$10,000.00
1	5,000	5,000.00
37	1,000	37,000.00
9	100	900.00
12	less than 100	280.00
	Refunds from 24 counties	3,160.00
	Balance from Andrew Biddle Estate received	2,933.81

This shows that our efforts have returned us nearly $60,000 obtained from 85 individuals and groups to add to the $52,000 start.

Besides the publicity given repeatedly by the Journal of MSMS and descriptive accounts in the Journal of the AMA and the Detroit Medical News and possibly some others, your President and Secretary have addressed by letter many individuals, representatives, officers and committees, reaching all county societies. All State Society Secretary's letters report Foundation progress.

The number of letters that have come to the President and to the Secretary with many suggestions and discussions of possibilities for development and progress of the Foundation indicate interest and support and some degree of enthusiasm.

The MSMS Foundation Committee met with the Board of Trustees at the Special Meeting of the Board in Lansing on February 6, 1946. Material for use in the forthcoming brochure was discussed and the President was directed to proceed with authority to procure professional aid.

An enforced absence of two months of the President since that directive has prevented the production of the finished brochure but contacts have been made so that something may be ready in the not too distant future. Various letters and suggestions have been helpful and will be utilized.

We have reached the half-way mark to the goal set for the initial contribution from the doctors. It was planned to reach the goal before approaching the laity.

The various motions on investments, change of depository and matters pertaining to finance have been carried out as directed by resolution in the February 6 meeting and report of action will be made by the Treasurer.

Respectfully submitted,

E. I. Carr, M.D., *President*

*Presented to the Foundation's Board of Trustees, May 22, 1946.

Resolution to the Late R. H. Stevens, M.D.

Whereas, Doctor Rollin H. Stevens has contributed much to the planning and in the creating of the Michigan Foundation for Medical and Health Education, and

Whereas, Doctor Stevens served faithfully as Trustee of the Foundation, and

Whereas, the many attributes—the endearing, congenial personality, the high attainments in the science of Medicine, and the business acumen—of Doctor Stevens are an irrepairable loss, now therefore

(Continued on Page 738)



malignancy incognito?

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Anonymous, Memory of Mother	1,000.00
Regis F. Asselin, M.D., Detroit	5.00
R. H. Baribeau, M.D., Jackson	50.00
Barry County Medical Society	50.00
M. G. Becker, M.D., Edmore	1,000.00
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85.00
C. D. Brooks, M.D., Detroit	1,000.00
J. D. Bruce, M.D., Ann Arbor	1,000.00
A. S. Brunk, M.D., Detroit	1,000.00
E. I. Carr, M.D., Lansing	1,000.00
L. G. Christian, M.D., Lansing	100.00
Clinton County Medical Society	50.00
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H. H. Cummings, M.D., Ann Arbor	1,000.00
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Dickinson-Iron County Medical Society	80.00
Eaton County Medical Society	70.00
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Gratiot-Isabella-Clare County Medical Society	125.00
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Hillsdale County Medical Society	95.00
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Houghton-Baraga-Keeweenaw County Medical Society	140.00
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Ingham County Medical Society	1,572.50
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Jackson County Medical Society	350.00
Joint Committee on Health Education	1,000.00
Francis Jones, M.D., Lansing	1,000.00
F. H. Lashmet, M.D., Petoskey	100.00
Lenawee County Medical Society	125.00
S. R. Light, M.D., Kalamazoo	100.00
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H. A. Meinke, M.D., Hazel Park	50.00
Menominee County Medical Society	55.00
Michigan Medical Service	10,000.00
Mrs. K. B. Miner, Flint	1,000.00
Monroe County Medical Society	145.00
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Cora Boyce Neal, Grand Rapids	1,000.00
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St. Clair County Medical Society	220.00
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R. H. Stevens, M.D., Detroit	1,000.00
C. L. Straith, M.D., Detroit	1,000.00
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H. L. Weitz, M.D., Traverse City	100.00
C. G. Wencke, M.D., Battle Creek	10.00
John O. Wetzel, M.D., Lansing	1,000.00
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Margaret H. Zalen, M.D., Kalamazoo	5.00
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(1) In Cash ☐ to be paid in the total sum ☐ or in annual payments of $.....

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**Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60
Proc. Soc. Exp. Biol. and Med., 1934, 32, 241
N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592.

TO THE DOCTOR WHO SMOKES A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

Political Medicine

TAFT-BALL-SMITH BILL

The Taft-Ball-Smith Bill S-2143 was introduced in the Senate May 3, 1946 to be known as "The National Health Act of 1946." The Preamble reads, "To coordinate the health functions of the Federal Government in a single agency; to amend the Public Health Service Act for the following purposes: To expand the activities of the Public Health Service; to promote and encourage medical and dental research in the National Institute of Health and through grants-in-aid to the States; to construct in the National Institute of Health a dental research institute and a neuropsychiatric institute; and for other purposes."

Section 1 gives the name; Section 2.—Health and medical functions are widely scattered, causing confusion and duplication. There are inadequacies of health services and of medical and dental services with a result that some persons are unable to secure adequate services. It is established as a policy of the United States through grants-in-aid to extend health, medical, and dental services to every individual regardless of race or economic status. It is also the policy of the United States to make provision for voluntary deductions from the salaries of federal employees of premiums directed by them to be paid to voluntary non-profit health insurance funds.

Title I creates in the executive branch of the government a National Health Agency administered by a National Health Administrator, a Doctor of Medicine of at least eight years' experience. Section 102 defines the purposes of the agency: to encourage the development of health services and facilities; to advise and cooperate with federal, state and private functioning agencies in the field of health; collect statistics, analyze, make studies, investigations and reports on conditions, problems, and needs in the field of health, and make available information in this field, et cetera.

The agency shall have responsibility for administration of funds appropriated as grants-in-aid to States for medical, dental and hospital and other health facilities; prevention of disease by sanitation; promotion of maternal, prenatal and child care, and study of child growth, development and nutrition; protection of health through truthful and informative labeling of foods, drugs, and cosmetics; training and rehabilitation of vocationally handicapped persons; et cetera.

Section 103 transfers all mentioned agencies to the department, including unexpended funds, titles, functions: The U. S. Public Health Service, Saint Elizabeth's Hospital, the food and drug administration, and the office of vocational rehabilitation; all the functions of the Children's Bureau of the Department of Labor concerned with the administration of Title V, parts 1 and 2 of the Social Security Act as amended and the functions and duties of the Division of Health in the bureau of research of the Social Security Board. All orders, rules and regulations to remain in full force and effect.

Section 104: Composition of the agency; (1) Office of the Administrator; (2) the Public Health Service (3) The Food and Drug Administration; (4) The Office of Vocational Rehabilitation; (5) The Office of Maternal and Child Health; (6) The Office of Health Statistics and (7) such other constituent units as the Administrator finds necessary. The balance of the Title is administrative.

Title II.—Amendments to Public Health Service Act clarifying terms, and adding a new section providing for research funds for four years. Title VII is added providing general medical services for families and individuals of low income. $200,000,000 is set aside each year for four years for making payments to the States to carry out the title. Section 702 provides for the formation of plans in the States to designate a single agency in each state. Health Advisory Councils are to include non-government organizations: Representatives of State Medical Societies, Voluntary non-profit medical and hospital associations, et cetera. "Such a plan may . . . provide medical care for home and office for low income persons . . . by means of payments of premiums or partial premiums by the State in behalf of these families and individuals unable to pay the whole cost of such insurance, to any voluntary health, medical or hospital insurance fund operated not for profit." The balance of the Title is administrative, describing the financial participation, methods of administration, reports. The Surgeon General shall approve the plan, but if he does not, appeal is provided for.

Title VIII is also added providing for dental health services for school children and families and individuals of low income. Sums of eight, twelve, sixteen and twenty millions are provided for the first four years. A State Advisory Council is authorized to set forth a program designed and calculated to provide for the annual inspection of the teeth of all children in the elementary and secondary public and private schools. Also to be included is care for families and individuals of low income. Rules and administration are provided, with appeal from the Surgeon General if dissatisfied with his action. Title IX is to further research and training in Dentistry Neuropsychiatric research, and new construction for research.

Title III.—Miscellaneous amendments to Vocational Rehabilitation; transferring functions of the Secretary of the Treasury in administration of Public Health Service; also providing for Saint Elizabeth's Hospital. Provision is made for agencies of the United States to deduct fixed sums or percentages to be paid to any public or private health insurance fund.

Such is a condensation of the new Taft-Ball-Smith Bill. It is much more comprehensive than the various Wagner-Murray-Dingell Bills, broader in scope and usefulness, and does not in any way regiment medicine. We will practice just the same as we are now. Most

(Continued on Page 736)

To lessen renal complications during administration of sulfonamides Combisul-TD

Combisul-TD is a combination of sulfaTHIAZOLE and sulfaDIAZINE in equal parts in one tablet. Administration of these two sulfonamides together reduces the likelihood of renal involvement even though the total quantity of sulfa drugs is the same as when either is used alone.[1,2] Danger of calculus formation with oliguria and anuria is largely eliminated by *Combisul-TD*, for even crystalluria is uncommon. The chemotherapeutic activity of *Combisul-TD* is equivalent to that obtained when either constituent is used in full dosage.



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1. Lehr, D.: Proc. Soc. Exper. Biol. & Med. **58**:11, 1945.
2. Lehr, D.: In press.

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TAFT-BALL-SMITH BILL

(Continued from Page 734)

people will pay their own way as they do now, either by care and payment at time of service, postpayment, by some form of insurance as they do now, or if they are of low income by being subsidized by the State agency in a non-profit voluntary health insurance plan. The bill also sets up a Cabinet post and Department of Health.

There is no question of the socializing of medicine. A five-year build-up is provided to bring this bill into full operation. Not a fully formed monstrosity.

HEARINGS ON S. 1606

Tuesday, April 16, 1946, Mr. William Green, President of the AFL, assured the Committee that the subject was not new in his organization. He stated that the working people of America are not satisfied with the present levels of health in this country, and that they were shocked to learn the extent of physical unfitness revealed by the selective service examinations . . . Out of their own family experiences working people have come to realize that the method of meeting the cost of medical care has a direct relationship to the availability of that care. "We do not say that all of those who oppose this measure and who are in disagreement with us are dishonest. We do say however that some of the organizations which have been busily stirring up opposition to this bill, depending largely upon false and misleading slogans and expending huge sums of money, should be thoroughly investigated.

Wednesday, April 17, was the American Medical Association day and Dr. R. L. Sensenich, Chairman of the Board of Trustees, was the first to appear. He stated the postion of the Association and outlined the constructive program which we are engaged in developing. He answered many questions put to him by the Committee. In fact, he was kept on the stand from ten o'clock until one o'clock when recess was taken for luncheon.

After luncheon, Dr. Lowell Goin of Los Angeles, California, was the first speaker and he discussed most admirably the conditions responsible for rejections of draftees. The Committee seemed particularly well pleased with his presentation.

Dr. Victor Johnson followed with a discussion of the effect the provisions of the bill would have upon medical education and hospital care.

The last speaker of the day was Dr. Walter V. Kennedy, President of the Indiana Mutual Medical Care, Inc. He pictured to the Committee the conditions he observed in England and Germany under the health insurance programs. Unfortunately the day was not long enough. The Committee seemed unusually grateful for the information brought by the witnesses and would have prolonged the hearing, but were obliged to close at five o'clock with the understanding that some of the witnesses might be called back at some future time for further consultation.

On Thursday, April 18, the first witness was Dr. Ernst Boas, Chairman of the Physicians Forum. He stated that his organization had about a thousand members of whom probably two thirds are residents of New York State. The forum unequivocally support S. 1606.

The second witness on Thursday was Dr. E. I. Robinson, President of the National Medical Association. He stated his Association "wishes to express its commendation to the men who have been responsible for formulating this bill, since it believes that only through the establishment of a sound national health program can the health of the nation be definitely improved."

The third witness on Thursday was Dr. Harold T. Low, President of the Association of American Physicians and Surgeons. Dr. Low, after describing the organization and objectives of the Association, stated: "The Association of American Physicians and Surgeons is essentially in accord with the objective of the proposed Wagner-Murray Bill, S. 1606. It is in almost complete disagreement with the methods proposed to obtain these objectives."

Speaking of the health insurance section of the bill, he said—"The Association firmly believes that these services can be provided satisfactorily through proper voluntary plans of prepayment sickness insurance."

He also made an analysis of the causes for Army rejection. He called attention to the fact that in countries where health insurance now prevails, there has been a "steady and fairly rapid rate of increase in the number of days the average person is sick annually, and there is a continuously increasing duration of such sickness." (Quoting from Sinai—"The Way of Health Insurance").

In closing he stated that doctors agreeing to participate would be subject to "the dictates, rules, regulations and red tape imposed upon them by bureaucratic control. They would be constantly at the mercy of lay control, political appointees, subject to the complaints of disgruntled patients as well as persistent demands from malingerers seeking certification of illness.'

"Compulsory health insurance will encourage public dependence, increase bureaucracy and the burden of taxation. It will lower the standards of medical practice, hinder medical progress, and result in regimentation of physicians and patients. Physicians are fighting this bill, not for financial preservation, but because they conscientiously believe it is not in the public interest but, on the contrary, will result in a serious impairment of the nation's health."

On Friday, April 19, only one witness was called—Dr. Edward H. Cary, Chairman of the Board of Trustees of the National Physicians Committee.

Dr. Cary opened with a statement of the expenditures of his organization from October 31, 1940, to October 31, 1945, and followed with a description of the educational program which the Committee has been conducting. He stated that the National Physicians Committee approves the first three clauses of the Wagner-Murray Bill but opposes the compulsory health insurance provisions. He offered certain amendments to the bill, among them that the Children's Bureau should be placed under the supervision of the Surgeon

(Continued on Page 738)

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Say you saw it in the Journal of the Michigan State Medical Society

HEARINGS ON S. 1606

(Continued from Page 736)

General and that the services should be available to all "mothers and all children in the state and locality who are unable to pay for such services without hardship and where such hardship is confirmed by the local unit of the agency." He also suggested that hospitalization should be included in the grants-in-aid of medical care of needy persons.

His principal testimony was directed to objection to the health insurance features in Title II. He drew a striking parallel as to what might be expected in the administration of the health insurance program by what had happened in the Veterans Administration following the first World War.

* * *

A constructive three-point program for national health was urged May 6 by John H. Hayes, president-elect of the American Hospital Association, before a Senate hearing on the Wagner-Murray-Dingell compulsory health insurance Bill. Pointing to the need for providing hospital and medical care on a wider basis, Mr. Hayes stated that the American Hospital Association favors expansion of Blue Cross Hospital insurance plans for employes and their dependents, federal aid under local supervision and administration for the needy, and a program for construction of additional hospital facilities in areas where needed.

Mr. Hayes said that the proposed legislation "would place the federal government in such a position in the health field as to lead inevitably to federal control and operation of the entire health system of the nation. Control of the purse-strings means control of the program, and we think this is highly dangerous."

"It is our aim to make more hospital and medical care available to more people," Mr. Hayes told the committee. "However, we do not believe it can be wisely and effectively accomplished in one bold stroke. Rather, the American Hospital Association believes that it requires an orderly, intelligent program which will be more closely integrated to the needs of our people."

In referring to federal concern for the health needs of the nation, Mr. Hayes called attention to the fact that the government has not as yet made the benefits of Blue Cross plans available to federal employes. "In our opinion," he said, "it would be far better that these voluntary hospital-sponsored plans with their broad coverage for the employed and their dependents be further extended before we consider compulsory insurance as the easy answer to the whole problem of distribution of hospital and medical care.

COMPULSORY HEALTH INSURANCE

Inevitably when *compulsory* health insurance, covering workers and their families, is being discussed, all questions resolve themselves into one highly important one: "Would the health of the nation be improved by adoption of such a system?"

Systems more or less similar to that advocated in the United States have been in force in a number of foreign countries, several of them for many years. The results, from the point of view of improving national health, have not been notably more satisfactory than the system of private medical practice.

Many are decidedly governmental in nature, whereas provision for medical care is so distinctly a personal matter that it would not seem to offer a desirable sphere for governmental activity on a compulsory basis. In view of the enormous growth of the health and accident business during the past several years, and the progress made in developing new types of coverages and lower cost policies, it may be hoped that medical care plans, such as are just beginning to be introduced. —*Insurance Economics Society of America.*

YOU AND YOUR BUSINESS

(Continued from Page 722)

lems of children, and the use of adrenalin and penicillin in mental disorders were among the subjects reported in the 120 papers presented.

The psychiatric aspect of job placement in industry was the subject of a round-table discussion Tuesday evening when representatives of industry, labor, and health agencies met. Participants were Nelson Cruikshank, director of social insurance activities of the American Federation of Labor; Dr. Raymond Hussey, dean of the School of Occupational Health, Medical Science Center, Wayne University; and Carl M. Peterson, secretary, council on industrial health, American Medical Association.

Other round-table discussions the same evening included group psychotherapy, the relations between veterans' hospitals and the community, and psychiatric nursing.

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

(Continued from Page 730)

Be It Resolved that we, the Board of Trustees of the Michigan Foundation for Medical and Health Education, express and extend our profound and deep sympathies to Mrs. Stevens and to the family.

Respectfully submitted,

Board of Trustees,
Michigan Foundation for Medical and Health Education.

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Editorial Comment

THE POLITICAL MACHINE BEHIND THE W-M-D BILL

Representatives of the medical profession from Colorado and several adjoining states gathered recently in Denver to hear a talk by Marjorie Shearon, Ph.D., upon the threats now besetting the practice of medicine as we know it today. Dr. Shearon is from Washington, where she is Research Analyst for the Conference of the Minority, United States Senate. Her years of experience in matters of social, economic and medical affairs of national importance, her intimate knowledge of political personalities, maneuvers and tactics, qualify her to speak as an expert; her frankness, fairness and impartiality are familiar to members of our profession who have long had a profound interest in these vital problems. Wisdom and sincerity characterize her speech and writing. Believing that the greatest possible publicity upon the character and motives of its perpetrators will be required to defeat the Wagner-Murray-Dingell Bill, we present here a digest of a portion of her talk. The regular medical profession since the beginning of World War II has been seriously disarmed incidental to absence of thousands of doctors in the armed forces and by the overwhelming burden which fell upon those remaining at home to fulfill the demands of civilian practice. It would have been surprising had the opportunists among our opponents not taken advantage of this opening to gain political power and prestige, nurse a grudge against the medical profession, attain a permanent and lucrative "job" for themselves and their stooges, and to justify and expand assignments and responsibilities incidental to important-sounding titles. We all need this information, particularly those now returning after three or four years of patriotic service. We all must know the forces which would cause our country to repeat the mistakes of other countries where socialization of medicine has ruined the inspiration for progressive practice and where its quality has deteriorated as its cost has increased. All of us must think, speak, write, work, and tell the voters the truth—if we are able to save our profession in America! The critical time is now, not after the mistake is made. There are forces without and within organized medicine which must be met. Let us abruptly face the facts.

Isidore Sidney Falk, Ph.D., heads a machine to nationalize medicine. He is of foreign extraction, born in 1899, educated at Yale following which he taught at the University of Chicago for five years. Those who know him well describe him as brilliant, a hard and industrious worker and "clever as hell." He manipulates statistics to "prove" that which furthers his aims and desires. False claims regarding his "cure" for influenza led to his being fired from the University of Chicago and to his grudge against the medical profession. Dr. Falk then became the Director of Research for the Committee on Costs of Medical Care. Thus he has become classed as an "expert" on the basis of data which is out-dated (if ever creditable) and some of which has been redated with obvious ulterior motives; he is one of the "overnight experts" readily available on any subject and in any field. He left the committee in 1933 and joined the Milbank Fund, associated with the since-deceased Director of Research. In 1935 he was given a year's leave of absence with pay and did a superficial job on European sickness insurance survey. And, of course, he wrote a book. Unfortunately, many of the fools who aspire to write a book ultimately do so; thus an expert may be created in less than overnight. The way was then paved to a position on the Social Security Board, even if it was in a mionr capacity at first. But in 1940, four men ahead of him disappeared and Falk became Director of Research and Statistics—in perfect keeping with his sleight-of-hand manipulations. Here he kept health studies cornered. His Director of Economics was a benign-appearing woman whose equipment got her in places where his own was less appropriate; she gets for him the kind of "statistics" he desires. Another woman on his staff has been assigned to "bring along" the labor groups, some of which are joining the forces who want to nationalize medicine. She prepares speeches and testimony for the labor people. All of Falk's original staff have resigned because they won't be parties to his type of dealing, but there remain some lesser lights in the fringe of his orbit. They comprise a skillfully managed team of several dozen people who know their jobs and who do the will of their boss like trained animals. Regular research is quashed and workers do and find what their chiefs direct.

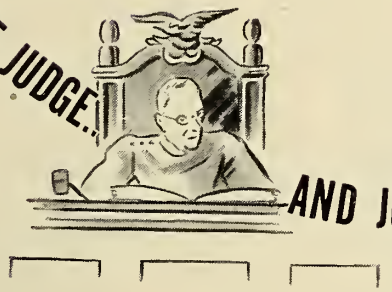
The Surgeon General of the United States Public Health Service was double crossed in 1939 when medical provisions of the Wagner Bill were subversively shunted to the Social Security Board. Falk smoothly altered it his way, and Dr. Parran has no illusions about him. In 1943 Falk fooled Parran again. Two new medical bills were prepared by Falk's outfit which claimed that the bills were only in the "study stage," and there was no immediate action brewing. But they had their case ready to spring. Next day a full-grown bill was introduced, the 1943 version of the Wagner-Murray-Dingell Bill, and the Surgeon General hadn't even seen it. Later on, Dr. Falk went through the motions of confiding in the U.S.P.H.S. and it is the job of one of his staff members to act as a go-between with it and the Social Security Board. Similarly, Falk went through the motions of confiding in nurses and dentists—all, of course, for the purpose of aligning them on his side. Sadly we note that Dr. Parran has now joined the collaborators; he has sold out the medical profession; the screws were put on him and he yielded; he has done what he thinks his administration wants him to do.

(Continued on Page 742)



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THE POLITICAL MACHINE BEHIND THE W-M-D BILL

(Continued from Page 740)

And thus a seven-billion-dollar insurance scheme may pass!

If it should pass, the plain fact is that the Social Security Board, with Falk the power behind that particular throne, would dictate to medicine in the United States. It would, by regulation, directive and edict, control every act of every physician, dentist, pharmacist, nurse and every patient. It would, after a few "introductrination years," control almost 25 per cent of the national income. This would be a tremendous step toward the totalitarian state. Call it national socialism, fascism, nazism, communism, or what you will, they all lead to the same thing. It has been officially noted in a Canadian study of European sickness insurance that during the early years of Hitler's regime, the German government's medical program was looked upon by many as one of the greatest props of the totalitarian state.

Politically the scheme appeals to some members of Congress a a means of raising money; it appeals to labor leaders because it gets votes. Since Falk is tireless and energetic, nice young U.S.P.H.S. men find it easier and more peacable to let him have his way. The Doctor tells the world that some fifty other countries have "arrived" at this means of fulfilling their health requirements, but we are "coming along" and none of our difficulties are insurmountable. This is characteristic of his honeyed and perverted sales talk.

Dr. Shearon quoted a modern definition of democracy: "the greatest good for the greatest number—whether they want it or not." And in this democracy, while thousands of us were out of the country caring for the men defending it, and other thousands carried the load at home to back up the fight, this is what happened. Falk and his gang were lining up a job and a future for themselves, not for the benefit of the people of America.

This, gentlemen, is the way it stands; we have pointed out the enemy of our profession and of the American way to practice it. If you haven't read "A Doctor Looks at the Wagner-Murray-Dingell Bill," by Dr. L. T. Brown in the March issue of this *Journal,* do so now. Then do all in your power to prevent scientific medicine and medical progress in America from following the Old World's mistake!—Editorial, *Rocky Mountain Medical Journal,* April, 1946.

SOME THOUGHTS ON "POLITICS"

No so long ago one of our valued readers criticized the Editors of this JOURNAL for venturing certain comments in their department dealing with local as well as world politics and social upheavals. Well, why should not the doctors express themselves on these subjects? They come pretty closely into our professional lives, and not only ours but our patients', for we have to deal with the mishaps that result from them. For example, an irresponsible labor leader in the largest city of this State tried to tie up its transport facilities and claims that this "may cause 5,000 deaths"; other labor difficulties paralyze harbor traffic and the delivery of essential fuels; in many places, mass picketing defies court injunctions and woe to him who tries to break through the lines; public schools are closed by fear of violence; men and women who want to work are slugged to keep them from working, and the constituted authorities can do little or nothing about it. Work stoppages bring on loss of wages and consequent family distress. Restraints to production in the factories, to the production of food on the farms, the distribution of subsidies, of grants-in-aid, of unrestrained spending by government and individuals, of centralized control of our lives and activities, all are among the many factors which contribute to this present universal condition of doubt and unrest. To say that the doctor has no interest either as a citizen or a professional man in these matters is absurd and nonsensical. He has a definite interest and he must express himself as an individual and in his organized groups. He seems loath to do either unless he can be roused to do so as an essential obligation. For he can be a power in his community if he so desires. Call it politics if you will, but participation need not label the doctor as a politician in a derogatory sense. As an individual and as a class, he must recognize how important his influence is in community life, how much responsibility rests upon his shoulders, and how he cannot escape from assuming his part. Legislators make laws, but they receive their directives from the people and among the later the doctor has a voice as well as his neighbor. Let him use it.—Editorial, *New York State Journal,* April 1946.

"THE MEDICAL LABOR FORCE"

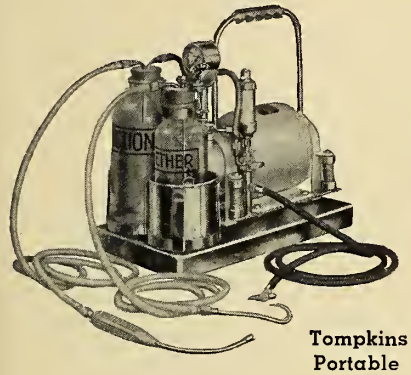
Of more than passing interest to physicians is a communication dated January 29 which was sent to all state chairmen of Procurement and Assignment Service for Physicians. Enclosed was a bulletin from the Bureau of Labor Statistics of the Department of Labor, entitled "Postwar Outlook for Physicians." This bulletin deserves notice because it acknowledges—at this late date—that "A considerable shortage of physicians is anticipated for years after the war . . . By 1950, the demand for physicians may exceed the numbers available for service by at least 10,000 and perhaps more than 20,000. . ."

Of peculiar interest are the reasons advanced by the Bureau as explanation for the deficit in the "medical labor force": "The shortage, which will continue even after demobilization of the doctors in the armed forces, results from a combination of long-term trends in the numbers of physicians trained, in the aging of the members of the profession, and in population growth, and postwar needs for medical services . . . The long-term rate of increase in the medical labor force has not kept pace with the increase in population. From 1910 to 1940, there was an increase of 13.4 per cent in numbers of physicians, as compared with a 43.2 per cent increase in population."

The statistician who is responsible for this report, and who wrote so glibly of "long-term trends in the numbers of physicians trained" was guilty of gross intellectual dishonesty when he did not report the truth,

(Continued on Page 744)

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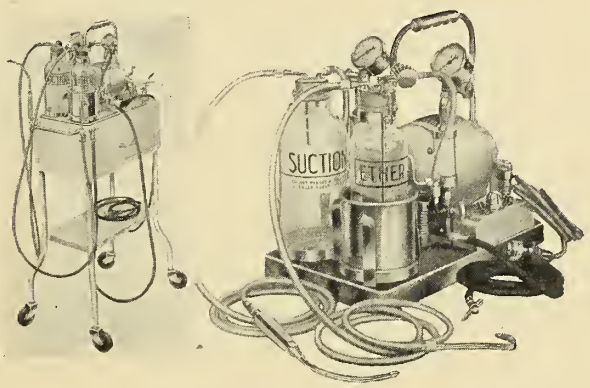
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"THE MEDICAL LABOR FORCE"

(Continued from Page 742)

about these trends. In 1910 medical education in this country was undergoing a process of evolution, as a result of the report by a committee from the Carnegie Foundation, appointed in 1908 at the request of the American Medical Association to survey the medical schools of the United States. The schools not approved by this committee—many of them were "diploma mills" —were forced to close up or to combine with other schools and raise their standards. In 1905 there were 158 medical schools in this country, with 5,600 graduates; by 1910 the number of schools had dropped to 131, with 4,440 graduates. In 1922 there were 81 schools, with only 2,520 graduates. From this point, however, the schools began to turn out more and more—and better and better—doctors, until in 1939, although there were only seventy-seven medical schools, there were 5,089 graduates. Under the accelerated program, 6,933 graduates were licensed in 1944.

From the above figures it should be plain to anyone who can think without perspiring that the relative decrease in the "medical labor force" of our country from 1910 to 1940 was due to a very desirable improvement in the quality of medical education, and that the "long-term trend" is toward an increase rather than a decrease in the physician-population ratio. The recent shortage of physicians has resulted chiefly from the unreasonably large number of doctors demanded by the army and navy. A future shortage is threatened by the short-sighted policy—repeatedly protested by medical educators—of refusing to exempt medical and pre-medical students from the draft.

This bulletin from the Department of Labor is only one more of the innumerable attempts made by various agencies of our federal government to discredit the medical profession, in order to pave the way for a politically controlled system of medical practice.—Editorial, *North Carolina Medical Journal,* April, 1946.

TRIAL HEAT FOR ORGANIZED MEDICINE

Disputes about health insurance boil down to the contention on one side that such plans should be controlled and administered by the Government, as opposed to our belief that the medical profession is the best trustee for the direction and implementation of any health insurance project. There has been no large scale experiment which either side can point to as proof of its thesis that Organized Medicine is or is not capable of conducting an extensive administrative project. In the past most of the notable advances in the health of the people have been made through the labor of individual doctors, but much of the promotion and organization has been in the hands of state and national officials.

The proposal that The Medical Society of New Jersey play a leading role in arranging for the care of veterans will effectively test on a state-wide scale the willingness and ability of Organized Medicine to conduct a program which has many administrative and political overtones. If the plan is accepted by the Veterans Administration, it will vest in the organized profession extensive authority in the setting up of examining agencies, selection of physicians, routing of patients and settlement of grievances. If we succeed in giving veterans an adequate program of medical care by doctors of their own choosing, this will establish beyond argument the competence of Organized Medicine to manage major health affairs. If, on the other hand, the counties quarrel as to the relative amount of control which they should exercise, or if there is much bickering about the fee schedule, or if there is an exploitation of the plan by a few individual doctors, or if there should be large scale non-participation by individual physicians—if any of these happen, the public will inevitably assume that the doctors of this state cannot be depended on to organize or operate a broad-gaged health program.

The Veterans Plan therefore, represents in a very real sense, a trial heat for Organized Medicine. It is an exceptional opportunity to demonstrate once and for all, the competence of the profession to assume leadership of activities concerned with individual or public health. If we fail, the Government may insist on federalized health insurance; and in their battle to effect such a program, we—the doctors—will have given them their most potent ammunition.—Editorial, *Journal, Medical Society of New Jersey,* March, 1946.

"1. As a taxpayer, I am opposed to a federal system of medical care because it is too costly and because it is unnecessary.

"2. As a citizen, I am opposed to a federal system of medical care because it is in direct opposition to the fundamental American principles of personal initiative and personal responsibility.

"3. As a physician, I am opposed to a federal system of medical care because in the first place, the medical needs of our people could not be served by a single central plan. In the second place, the experience of other countries has not shown its great worth. In the third place, such a system is not necessary to bring about the improvements which are needed in our present system of medical care; and lastly, no physician can conscientiously and efficiently serve two masters, his patient and the governmental agency."—Editorial, *Journal, South Carolina Association.*

THE OTHER SIDE OF THE FENCE

During the past four years, many of us have had the privilege of practicing medicine in a regimented way. The word privilege is used because we believe that it will be one of the main factors in producing an organized front for medicine in the next few years. We have seen the wanton waste of scientifically trained manpower, instruments and supplies. We have seen office after office filled with clerks just to keep records. We have seen the entire routine of a portion of the medical staff of a hospital upset for a day to track down an unjustified complaint.

Labor lauds the scientific advances of medicine in one breath and lambasts it in the next by quoting comparative international statistics. One can prove anything by statistics, particularly if the yardstick for measuring these statistics is a different length in every country.—Editorial, *Journal, Kansas Medical Society.*

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GRADUATE TRAINING PROGRAM OF NAVY MEDICAL CORPS

Graduate medical training consists of three general types: (a) internship; (b) residency-type training; (c) continuation courses and special courses.

The primary purpose of graduate medical training is to increase the proficiency of medical officers and to improve the standards of medical practice. Training in the medical specialties may lead to qualification for American Board certification, fellowship in one of the American Colleges, or other marks of distinction, as in civilian life, but these attainments should be considered as secondary. Every degree of graduate training, whether of the residency type or by clinical or special assignments, adds stature to any medical officer and increases his proficiency in this work.

Medical Officers desiring graduate training are encouraged to seek these opportunities, whether they propose merely to improve themselves as practitioners or to seek full qualification and recognition as specialists.

A. *Intern Training*

Approval of U. S. Naval Hospitals for internship training is based upon standards of and action by the Council on Medical Education and Hospitals of the American Medical Association.

B. *Residency-Type Training*

1. Approval of residency-type training in U. S. Naval Hospitals in medical and surgical specialties is based upon standards of and action by the above-named Council and American Boards acting jointly, and additional approval for graduate training in surgical specialties only is based upon standards of and action by the American College of Surgeons.

2. Approval of residency-type training in Naval Hospitals is in most instances for limited periods of time, such as one to two years of the total experience necessary for qualification for American Boards or for the accumulation of credits for the American Colleges. Unless an officer is on duty in a hospital in a specialty with unlimited approval, his training must be supplemented by further training in the same specialty but in another institution, Naval or civilian, in order to meet Board or College requirements.

C. *Continuation and Special Courses*

1. Continuation courses are designed for officers desiring brief courses after some type of dislocation from their usual lines of practice, or for the purpose of further improving themselves in some branches of medicine in which they may be especially interested. Such work may be obtained in short courses designed for these purposes, or by means of clinical assignments to naval or civilian hospital services where the applicant may add to his experience by direct clinical work.

2. It is not practical to assign to civilian institutions medical officers lacking the necessary background, preliminary training and screening in their requested specialty. It will be necessary to show an acceptable degree of aptitude for the work, acquire a certain amount of professional skill and exhibit a genuine desire for advancement to certification prior to consideration for further training. Courses of instruction in civilian institutions are not to be considered as necessarily leading directly to eligibility for examination by the specialty boards.

3. Special courses for instruction in lines of work peculiar to Naval needs are well known. These include such courses as: aviation medicine, submarine medicine, preventive medicine, industrial medicine, medical statistics, research, island medical administration, tropical medicine, and epidemiology.

ARMY OFFERS PAID INTERNSHIPS TO UNIVERSITY MED STUDENTS

Junior class medical students now in approved civilian medical schools will be offered internships in U. S. Army hospitals starting July 1, 1947, Major General Norman T. Kirk, The Surgeon General, announced.

These internships will differ from those offered medical school graduates for the 10 years prior to the war in that interns selected will be given a reserve commission of First Lieutenant in the Army Medical Corps. Under the former program, interns in Army hospitals were classified as civilian War Department personnel at an annual salary of about $1,000.

Internships, under the present plan, will enable the intern to draw the salary of a First Lieutenant, or about $3,404 annually if there are dependents. If the intern has no dependents, he will receive $2,972 a year. These figures include rental allowances of about $60 per month which are not paid when government quarters are furnished.

Designed to give the fifth or clinical year of training, the course will be of the conventional rotating type. This service in Army hospitals is recognized by the council on Medical Education and Hospitals of The American Medical Association, and State Boards of Registration which require the clinical year of training before granting a license to practice.

DISCHARGED MEDICAL DEPARTMENT OFFICERS MAY HAVE ACTIVE DUTY

The door was open for any discharged Medical Department officer to re-enter the service at his own request if he is given the green light by the Adjutant General's office.

Under Army Service Forces Circular No. 82, dated April 1, provision was made for the return to duty of specialists for either an unlimited tour of duty or until June 30, 1947. Quotas have been allotted the medical,

(Continued on Page 827)

The JOURNAL
of the Michigan State Medical Society
Issued Monthly Under the Direction of the Council
VOLUME 45 JUNE, 1946 NUMBER 6

Otitis Externa

By Major Mac D. Campbell, MC
Royal Oak, Michigan



A combination of heat and humidity and rain during the hot months in this area contributes to the activity of fungi and bacteria in the air, on the land, and in the lakes. The skin, clothes, shoes and bed clothes of people are clothed with spores and bacterial growths that propagate tremendously. These members of plant life get into the most annoying warm, moist and protected places such as between the toes, in the eyes, and outer ear canals and in the saddle region. Man's curious fingers apparently carry the infestation from place to place. During this time the sebaceous glands and cerumen glands of the outer auditory canal are more active, their secretions quite fluid and less viscous and their open mouths more open than in cooler months. These factors permit ready and easy access to the subcutaneous tissue through the sebaceous and cerumen glands, thus permitting the spread of infection to underlying soft and yielding surrounding tissues. In contrast to the above, the inner part of the canal is lined with thin, flat, smooth, sensitive, dry skin, devoid of hair, containing a minimum of glands. It is stretched tightly over the osseous auditory canal and continued over the tympanic membrane.

In a routine examination of the external auditory canal it is not unusual, although not frequent, to observe white or white-black granular or flat growths of mold or fungus on the epidermis. Innocent and peaceful, they remain without complaints from the patient and confined to the inner bony canal. I have never seen it so on the skin of the cartilaginous portion; in fact, the results of its having gained speedy access into the sebaceous and cerumen glands is what we hear about and see.

The Unit Surgeons must treat the bulk of these conditions, which are caught early, and from them I have learned that various medications such as cod-liver oil; ichthyol and glycerine; phenol and glycerine; tincture mercressin; sodium sulfadiazene, and sodium salicylate with buffered alcohol; sulfa powder mixtures and others have been sufficiently efficacious to effect many cures. The cases we get in the clinic evidently are the ones that get out of control, out of which number, many require hospitalization. Bacteriological studies usually reveal a mixture of aspergilli, streptococci, staphylococci, and short bacilli. Staphylococcus and streptococcus dominate the routine culture reports.

Etiological factors are interesting when the men state that they had "no ear trouble" until:

1. They went in swimming, following which an earache began within one to three days
2. They took a shower the night before
3. They awoke one morning digging their ears
4. They felt an itchiness in the ears
5. They felt an earache for no reason at all.

Diagnosis

The disease process may be confined to the: (a) osseous portion of the canal, (b) cartilaginous portion of the canal, (c) both portions.

From the Eye, Ear, Nose and Throat Clinic, AAF Regional Station Hospital, Orlando Army Air Base, Orlando, Florida.

Because the skin in the osseous portion is thin, devoid of secretory elements and hair follicles except along the roof, it follows and is borne out by clinical observation that the infection is slow to gain a foothold and may lie dormant until a favorable medium in the form of water or perspiration is supplied. This moisture aids growth and devitalizes the thin skin to allow an entrance into the subepithelial tissue. One observes that the pale, parched, clean, and tidy canal has turned to redness and swelling, associated with earache. The details of drum and canal are lost in a rosy dimness and white or white and black moldy concretions lie on the surface of the epidermis or on an accumulation of dark brown wax. Of course, you can't see the streptococci or the staphylococci. The earache is not affected by movement of the lobe and may cause insomnia. Hearing is not affected sufficiently to interfere with the usefulness of the soldier. Audiograms reveal no more than a ten to twenty decibel loss of hearing.

Serous and hemmorrhagic blebs, especially the latter, are frequently found on the inferior and lateral aspects, causing a marked encroachment on the lumen and adding to the duration of the disease. You will observe the absence of pulsating discharge, serous or purulent. If a pulsating discharge is present, a co-existing otitis media is concluded which in our clinic has been noticed twice and must be kept in mind. After the painful phase has passed the course may be prolonged in a few cases by continuous thick, fatty, purulent-like secretion emanating from the epidermis on the ceiling of the canal and adjacent drum head. Continuous daily treatment up to twenty-one days will usually effect a return to normal in these reluctant cases.

The cartilaginous part of the canal seems to be the one that we see most frequently involved in the Eye, Ear, Nose and Throat Clinic. Early in the disease process the epidermis is red and thickened, the lumen narrower, canal tender on palpation, ear lobe painful on movement and insomnia. There may or may not be a greasy, thick, macerated material in the lumen. Sebaceous and cerumen secretion becomes (1) diminished, (2) paralyzed early, (3) becomes re-established after the acute phase has begun to subside. This serous-sebaceous, milky discharge supervenes because:

1. Of a lack of vigorous early treatment.

2. Of the presence of an acute exacerbation of an underlying eczematous condition.

3. Of the use of medications that encourage glandular secretion, consequent epidermal thickening, and stimulation of infected foci lying in and around these glands.

The infection progresses to a point where the canal is practically obliterated and a small cotton-tipped, steel applicator cannot penetrate farther than the bony hump on the floor of the lumen. As this stage regresses you will, within the next few days, find that your small applicator will pass through this bottleneck and just drop or give into the space between the hump and the drum. Should one or few glands become involved while the rest of the canal is not affected, an external otitic furunculosis is present. Treatment for this affair follows the general lines of treatment, and does not include incision. The only time incision or a healthy excision of skin is made into or over a furuncle is when the acute stage has passed and a soft, fluctuating tumor is palpated in the wall. Ample drainage is thus obtained and general treatment follows.

Treatment

A. General: (1) Outpatient; (2) Ward patient.

B. Local: (1) Inner canal; (2) Outer canal.

The treatment followed in the outpatient clinic and on our ward has been set up with the thought in mind that we are dealing with a condition that may be prolonged unless dealt with in an energetic manner, so that the soldier may return to duty and classes as speedily as possible.

A. (1) The general treatment of the clinic outpatient is:

1. Two glasses of water every hour during the day.
2. One capsule consisting of sulfadiazine gr. V and soda bicarbonate gr. X (sulfa and soda caps) to be taken after meals and two at bedtime. This is an adult dose.
3. Hot boric acid compresses are applied to the affected ear for twenty minutes every two hours.
4. One AFCC (Air Force cold capsule) (codein sulfate gr. 1/2, atropine sulfate gr. 1/400 and aspirin gr. X) is taken thrice daily, after breakfast, after supper, and at bed time.

A. (2) The general treatment of the patient in the ward is subject to two regimes. The first one is known as "First Day Standing Orders." This consists of:

1. Bed rest.
2. Four hundred c.c. of water, taken by mouth every hour.
3. Sulfanilamide gr. V and soda bicarbonate gr. XV, taken at the hours of 8-10-12-2-4-6-8. Sulfadiazene gr. VII 1/2 and soda bicarbonate gr. XV to be taken at 9-11-1-3-5-7-9.

4. Sulfadiazene and soda bicarbonate alone may be used hourly, instead of the above regime, from 0800 to 2100, with an additional dose of 1 gm. at 2130.
5. If penicillin is available, an intramuscular dose of 25,000 units is given every three hours until the swelling and pain and inflammation have completely subsided. This very effective medication may be used exclusively or in conjunction with the sulfa regimes.
6. Hot boric acid compresses are applied to the affected ear for twenty minutes every hour.
7. AFCC are given before meals and at bedtime to control pain.
8. Morphine sulfate gr. 1/4 is ordered as required for uncontrolled pain.

The patient is automatically started on this procedure as soon as he is bedded in the ward. Another automatic sulfonamide order is termed "Second Day Standing Orders." This plan is similar to the First Day Standing Orders with an exception. The sulfadiazene and soda medication is deleted from the routine in paragraph 3.

Second Day Standing Orders are continued daily thereafter until discontinued or changed to First Day Standing Orders in order to speed up a reluctant or tardy infection. Sulfanilamide is favored for the streptococcus infections and sulfadiazene for staphylococcus, pneumococcus, and meningococcus infections. Soda and sulfa pills are given by the hour, on the hour, plus a maximum water intake, for an average sulfa level in the blood of 10 to 12 mgms. per cent. The nurse brings the medication to the patient and stands there until one glass of water has been consumed with the pills. After making her medication rounds of the ward she repeats, with another glass of water to each patient. This procedure seems adequate to keep the pH of the urine around 7. Few people like water, especially the tasty brand we have here during the hot days, and if you do not stand there beside them, those cola and pop-hopped addicts will not drink it.

9. Diet. An allergic factor may aggravate or prolong the resolution of externa otitis. Since many of the annoying allergic factors are found in liquids and desserts that are consumed, the patient is put on "water only" for liquids and beverages. Desserts are also eliminated to give advantage to soups, salads, raw and cooked vegetables, meat, dark bread, butter, and cheese.

Local Treatment

Local treatment varies with the presence of infection in the outer (cartilaginous portion) or the inner (osseous portion) auditory canal.

Osseous Canal.—The treatment at this early stage consists of:

1. Daily gentle syringing of the ear canal with two to three steel syringefuls of body-warm water or 50 per cent peroxide.

2. Remove all moisture and discharge from the canal with a cotton-tipped steel applicator, a small tipped aspirator and an air pressure tip.

3. Application of medicine. This may be done with an applicator (cotton-tipped steel) whereby the walls are (1) painted or, (2) the medication poured in, using an eye dropper, followed by a firmly fitting cotton plug inserted to the depth of the bony hump on the floor. Application is done daily. Medicines used and applied by the Unit Surgeons are:

(a) Cod-liver oil.
(b) Tr. mercressin.
(c) Sodium salicylate in alcohol.
(d) Sodium salicylate, sodium sulfadiazene and 70 per cent alcohol buffed with sodium hydroxide.
(e) Alkaline aluminum subacetate or Burrow's solution.
(f) Five per cent acid aluminum acetate.
(g) Gentian violet.
(h) Ten per cent ichthyol and glycerine.
(i) Five per cent phenol and glycerine.
(j) Sulfonamide powder mixtures.
(k) Equal parts of 5 per cent aluminum chloride in 70 per cent ethyl alcohol and 5 per cent sodium salicylate in 70 per cent ethyl alcohol.
(l) Five per cent aqueous mercurochrome.
(m) Equal parts of a 5 per cent aqueous mercurochrome and a saturated solution of boric acid.
(n) Five per cent sulfadiazene water-soluble face cream.
(o) Five per cent sulfanilamide ointment.

A third method of application is using two cotton-formed wicks. The inner cotton wick impregnated with medication is so placed in the canal that it is snug to the walls without being packed. The outer wick is packed firmly into the outer canal so that: (1) It will hold the inner wick in place as it tends to fall out or the enlisted man is prone to dig or pick it out. (2) It absorbs an excess of medication in the inner wick. (3) It prevents an excess of medication from running down the patient's neck. (4) It prevents the inner wick from drying out. (5) It prevents the possibility of fungus and bacterial additional contamination while the patient is under treatment.

The reason the inner packing has to be snug without packing or pressure is because the penetrating solution will destroy the epidermis of the osseous portion of the canal and leave painful small round potholes on its floor or sides or perforate the tympanic membrane.

A tardy postacute infection on the drum may be hurried to termination with light applications of 10 to 50 per cent silver nitrate.

Hemorrhagic blisters are frequently broken and pain abated over night by instituting the antisep-

tic and anaesthetic action of 1 per cent to 5 per cent phenol and glycerine solution or they may be gently incised. Should the canal become so diminished as to obliterate the drum landmarks, immediate hospitalization should be considered as the patient requires general hospital and local treatment. It usually takes about three weeks to cure these cases with an occasional associated or coincidental perforation and an otitis media, acute.

Cartilaginous Canal.—Here we contact the most frequent locality of infection as well as the most frequent locality of canal deformity and swelling in and around the ear. The same medications may be used. Packing with cotton wicks in the outer canal may be more vigorously and enthusiastically applied. This depends on how much the patient will comfortably endure. The hospital ward patient attends the Eye, Ear, Nose and Throat Clinic daily. Time of treatment is between 0645 and 0800. On account of the accumulation of ward patients ranging from twenty-five to fifty in number at times, it was found expedient to have these men treated before the clinic patients started to "jam the waiting room." By 0830 all ward patients were in bed again so the head nurse could:

1. Change or activate the orders on the Doctor's Order Book, thus avoiding a delay in treatment.
2. Be able to send the respective patients to mess as well as classify those who are or were attending the convalescent program.

Medicines, past and present, recommended, donated, bought, and read about have been and are being used. (The collection has been listed above.) The medicines used should have the following properties:

1. The medicine should be in a state of continuous application to the walls of the diseased canal.
2. It follows that it should be non-irritating and painless but penetrating.
3. It should be non-corrosive in order that it may be packed lightly or tightly in the canal so that swelling or canal deformity may be arrested and diminished and thus localize the infection. The medicine-loaded packing will prevent further spread of infection into normal tissue, as well as stop sebaceous gland activity with subsequent thinning of the epidermis, and so reduce the infectious activity. Another point to remember is the possible activity or re-activation of an allergic secretion. In such a case an alcohol or irritatiing medication would not be beneficial.

Our experience in this hospital leads us to conclude that 5 per cent aqueous mercurochrome is the most efficient medicine. The advantage that mercurochrome has lies in:

1. Its property of staining and penetrating diseased areas.
2. Its ability to form dry, red, coagulated crusts that overlie healed areas.
3. The ease with which these crusts are syringed off the normal pink or pale areas revealing the red stained diseased areas.

Gentian violet also stains diseased areas but it is not amenable to syringing from normal areas. It has a depressing color in contrast to the lively crimson color of mercurochrome.

The local and general treatment is continued and it is found that:

1. The pain was controlled or had subsided after one to two days.
2. Canal deformity reduced on or about the third to fifth day.
3. Patient went to duty on or about the seventh day.
4. Cases complicated with circumaural edema, cellulitis, or involvement of tympanic membrane usually cleared up in from fourteen to twenty-one days.

After the acute phase has passed and the lumen of the auditory canal has returned to its normal size, a light coating of hot sulfanilamide powder, blown into the canal, may be substituted for the pack to absorb further moistness. A thin crusted plaster is formed which can be easily removed by gentle syringing.

Any eczematous dermatitis that remained following the infection phase usually yielded separately or in combination to 10 per cent to 50 per cent silver nitrate or 5 per cent boric acid ointment, or hot sulfanilamide powder.

The additional use of 70 per cent ethyl alcohol as a swabbing or cleansing agent in the receding stage is beneficial:

1. To remove the mercurochrome crusts.
2. To determine the presence of unhealed areas in the ear canal through the burning sensation complained of by the patient.

A survey was made of the number of eye, ear, nose and throat patients admitted to the AAF

Regional Station Hospital and to the Eye, Ear, Nose and Throat Clinic at Orlando, Florida. Three thousand personnel was the average case load served by this specialty each month for the year of 1943. The following observations were made on the subject of external otitis, for the period of March to December, 1943 (inclusive):

Hospital Cases

Total: 130 Cases

I.	Days in hospital:	
	(a) Shortest	1 day
	(b) Longest	21 days
	(c) Over ten days	13 cases
	(d) Average	6 days
	(e) Average excluding the above 13 cases	5 days
II.	Recurrences	2 cases
III.	Uncomplicated cases with old perforations	2 cases
IV.	Associated with otitis media, acute, suppurative	2 cases

Clinic Cases

Month	Treatments	New Patients	Average Number of Treatments
March	82	8	10
April	92	12	8
May	171	20	8
June	264	47	5
July	423	57	7
August	622	130	6
September	468	77	11
October	304	28	11
November	146	14	10
December	119	12	10
Total	2684	407	6.7

July, August and September were found to yield the heaviest load and it is interesting to note the average number of treatments per case was around six. This was true for hospital cases as well as clinic cases. A contributing factor to the higher number of treatments per case for the fall and winter months is the stubborn eczematous, allergic or other dermatitis that has its basis as a rule in some underlying constitutional defect.

Conclusion

1. A technique is offered for the treatment of otitis, externa, acute and chronic.

2. The parenteral use of sulfonamide and/or penicillin in conjunction with the packing of 5 per cent aqueous mercurochrome alone or in equal parts with saturated solution of boric acid has made the treatment of this disease a joy to the doctor and a pleasure to the patient.

Benadryl in Hay Fever, Asthma, and Vasomotor Rhinitis

By S. E. Barnett, M.D., F. M. Barbas, M.D.,* S. B. Goss, M.D.

Detroit, Michigan



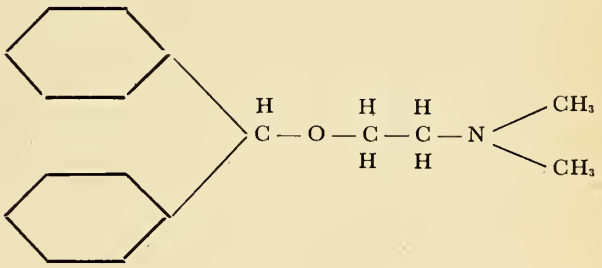
S. E. Barnett, M.D.



S. B. Goss, M.D.

THIS is a preliminary report on use of Benadryl† in the managament of certain manifestations of allergy in eighty-seven cases including hay fever, asthma, and vasomotor rhinitis.

Benadryl is a white crystalline powder, soluble in water and alcohol. It is stable under ordinary physical conditions. The chemical name is Beta-dimethylaminoethyl benzhydryl ether hydrochloride and its structural formula is:



Benadryl belongs to a new and distinct pharmacologic group of compounds with specific antihistamine action. The term *antihistamine* designates chemical compounds which prevent at least some of the pharmacologic actions of histamine. Animal experimentation[1,2,3,5] reveals that Benadryl antagonizes the effects of histamine on smooth muscle in the bronchioles and intestines of guinea pigs,

*Deceased.

†Benadryl supplied by the Department of Clinical Investigation, Parke, Davis & Co., Detroit 32, Michigan.

TABLE I. CLINICAL RESULTS WITH BENADRYL IN FORTY-SIX CASES OF HAY FEVER

Name	Sex	Age (yrs.)	Duration of Illness (yrs.)	Skin Tests	Length of Treatment	Dosage	Side Reactions	Result
H.K.	M	11	3	spring grasses and dandelion	2½ mo.	100 mgm. daily	none	complete relief
L.C.	M	54	15	spring and fall pollens	1 mo.	Parenteral 2 cc 150 mgm. daily	slight drowsiness and nausea	complete relief
L.K.	M	15	6	fall pollens, wheat, fish, eggs	3 mo. 2 days	150 mgm. daily	slight drowsiness	very much improved—essentially free from symptoms
B.K.	M	4	2	early grasses, fall pollens, deep sea food	2 mo. 5 days	Elixir 150 mgm. t.i.d.	none	sleeps well—breathes easier much improved
F.K.	F	35	16	spring grasses, early fresh fruit, cheese	3 mo. 3 days	150 mgm. daily	drowsiness four days	marked improvement 10-25-45 complete relief
B.L.	M	15	4	fall pollens	3 mo. 5 days	100 mgm. daily	drowsiness marked	marked improvement
C.M.	F	30	10	none	5 weeks	100 mgm. daily	none	improved
L.M.	M	32	30	fall pollens	25 days	Parenteral 1 cc 100 mgm. q 3 hrs.	slight drowsiness	not improved
J.P.	F	50	25	fall pollens, house dust, some foods	4 weeks	50 to 100 mgm. daily	none	much improved
J.P.	F	30	10	none	2 mo. 22 days	50 to 150 mgm. daily	slight drowsiness	complete relief from symptons
M.R.	M	38	2 weeks	none	5 weeks	50 mgm.	no report	incomplete
H.R.	M	11	3 weeks	early grasses, fall pollens	2 mo. 1 day	Elixir 25 mgm. t.i.d.	none	marked improvement
A.S	M	28	10	pollens and yeasts	2 mo. 21 days	50 mgm. daily 1 cc. Parenteral q 72 hrs.	extreme drowsiness	complete relief
S.S.	F	20	since childhood	early grasses, fall pollens	3 mo. 9 days	150 mgm. daily	none	marked improvement with complete relief during mid-season
R.T.	M	14	10	fall pollens	1 mo. 12 days	100 mgm. daily	none	improved
G.K.	M	31	10	not done	6 weeks	150 mgm. to 200 mgm. daily	slight drowsiness	improved by taking 200 mgm. daily —nose still blocked though
L.G.	M	16	3	fall pollens	5 weeks	150 mgm. daily	none	marked improvement
P.N.	M	53	5	fall pollens	3 days	150 mgm. daily	severe drowsiness vomiting	some relief but discontinued medication
S.Z.	F	40	24	fall pollens	5 weeks	100 mgm. daily	none	complete relief
H.B.	M	28	15	fall pollens	2 mo.	150 mgm. daily	slight drowsiness for 8 hours	marked improvement with several days of complete freedom from symtoms, then complete relief
L.S.	F	32	6	house dust fall pollens	3 mo.	100 mgm. daily	slight drowsiness	complete relief
R.H.	F	30	5	fall pollens	5 weeks	200 mgm. daily	none	marked improvement at first, then complete relief
N.T.	M	17	5	not done	6 weeks	150 mgm. daily	slight drowsiness 24 hrs.	complete relief
H.B.	M	69	31	fall pollens	3 mo.	150 to 200 mgm. daily	slight drowsiness	complete relief
C.B.	M	30	10 days		14 days	150 mgm. daily		incomplete
L.B.	M	30	15	fall pollens	5 weeks	150 mgm. daily	none	improved
B.B.	M	49	40	fall early grasses and pollens	3 mo. 18 days	150 to 200 mgm. daily	drowsiness and slight nausea	has had some bad days but on a whole has shown much improvement
E.C.	M	56	17	fall pollens	9 days	100 mgm. daily	none	improved
M.F.	M	40	5	none	15 days	50 mgm. daily		incomplete

TABLE I—CONTINUED

Name	Sex	Age (yrs.)	Duration of Illness (yrs.)	Skin Tests	Length of Treatment	Dosage	Side Reactions	Result
H.F.	M	48	2	fall pollens	4 weeks	150 mgm. daily	slight drowsiness	complete relief
H.G.	M	15	5	fall pollens epidermals	4 weeks	Elixir 150 mgm. qid	none	marked improvement
W.H.	M	51	8	none	1 mo. 11 days	50 mgm. daily	none	slight improvement
H.H.	M	43	17	fall pollens	1 week	100 mgm. daily	marked drowsiness to stupor	discontinued medication due to drowsiness
T.Z.	M	9	5	wool, fall pollens				incomplete
S.K.	F	35	20	foods, fall pollens	5 weeks	150 mgm. daily	slight drowsiness first 72 hours	complete relief of symptoms
E.S.	F	45	15	none	7 weeks	100 mgm. daily	slight drowsiness 48 hrs.	complete relief
R.Z.	M	7	5	none	5 weeks	100 mgm. daily	none	improved
H.L.	F	20	10	foods spring fall pollens	5 weeks	100 mgm. daily	none	marked improvement
G.P.	M	30	10	fall pollens	4 weeks	150 mgm. daily	none	immediate and prolonged improvement
G.W.	F	19	10	epidermals fall pollens	2 mo.	100 mgm. daily	none	relieved
N.P.	F	23	2	fall pollens	3 weeks	150 mgm. daily	none	complete relief
A.H.	F	59	20	fall pollens	1 mo. 4 days	150 mgm. daily	none	improved
B.C.	M	58	25	fall pollens house dust foods	1 week	100 to 300 mgm. daily	drowsiness fifteen days	no improvement
R.Z.	M	7	4	none	3 weeks	150 mgm. daily	none	improved
A.G.	M	36	10	fall pollens	1 mo.	150 mgm. daily	none	improved
K.G.	F	40	8	fall pollens	6 weeks	150 mgm. daily	none	improved

and appears more potent, in this respect, than any compound heretofore described.

Benadryl alleviates histamine shock and anaphylactic shock in guinea pigs. This probably results for the most part, from reduction in bronchial constriction. It is probable, also, that the vaso-depressor effects of histamine are partly abolished; in anesthetized dogs, Benadryl partly suppresses the vaso-depressor action of small, intravenous doses of histamine. Experimentally, it has been demonstrated that a practical maximal inhibition of about 94 per cent is obtained with 4.0 mg. per cent per Kg. of Benadryl. In addition, it has been demonstrated that a constant per cent of any dose of histamine appears to be antagonized by a given dose of Benadryl—as measured by blood pressure response in dogs.

Table I summarizes clinical data in a series of forty-six private patients with hay fever. Five may be eliminated as incomplete because patient cooperation was lacking. Of the forty-one remaining, only one may be recorded as manifesting only indefinite clinical results. Forty showed complete relief or very marked symptomatic improvement. All patients, within two to three days after initial therapy with Benadryl, exhibited significant clinical improvement including decreased itching of the eyes, nose and throat and a decided decrease in nasal and postnasal discharge, improved nasal ventilation and a general feeling of well being.

Results in the thirteen cases of asthma summarized in Table II are inconclusive. Six patients revealed definite improvement, two felt worse, five reported no improvement.

Analysis of results in the twenty-eight cases of vasomotor rhinitis summarized in Table III reveals seven cases symptom-free, seventeen cases improved, three unimproved, and one case in which the complaint was apparently aggravated. This is the most common group seen by the rhinologist and is sometimes called allergic rhinitis, atopic rhinitis, and paroxysmal rhinorrhea. Both perennial and seasonal cases are represented. One observer[4] claims the majority of chronic nasal symptoms seen

TABLE II. CLINICAL RESULTS WITH BENADRYL IN THIRTEEN CASES OF ASTHMA

Name	Sex	Age (yrs.)	Duration of Illness (yrs.)	Skin Tests	Length of Treatment	Dosage	Side Reaction	Results
B.C.	M	58	25	fall pollens house dust	7 weeks	200 mgm. daily	none	improved
T.M.	M		6	pollens	4 weeks	50 to 300 mgm. daily	none	asthma slight improvement
M.F.	F	74	10	dust	4 weeks	50 to 150 mgm. daily	sleepy and nausea at times	slight improvement
R.L.	F	24	14	dust fall pollens	4 weeks	50 mgm. daily	very drowsy at first	no improvement
B.B.	M	49	40	pollens	4 mo.	50 to 150 mgm. daily	dryness in throat	improved
E.W.	F	21	10	none	6 mos.	150 mgm. daily	none	improved
J.S.	M	5	1	none	1 mo.	30 mgm. daily	none	improved
A.H.	F	69	20	spring and fall pollen	4 mo.	150 mgm. daily	none	improved
I.G.	M	25	8	food feathers	4 mo.	100 mgm. daily	drowsy at first	improved
J.E.	M	53	16	dust, eggs, potatoes	4 mo.	150 mgm. daily	nausea	no results
F.S.	F	44	22	none	2 mo.	50 to 150 mgm. daily	none	no results
P.N.	M	53	5	fall pollens	1 mo.	150 mgm. daily	numbness	no results
S.B.	F	37	18	foods	2 mo.	150 mgm. daily	none	slight improvement

in office practice are of allergic origin, house dust being responsible for 90 per cent of cases seen.

Dosage

All patients studied received the same basic dosage management with Benadryl. Not knowing its clinical effects on our patients, we initiated therapy in each instance with a dose of 50 mg. Benadryl (capsule) once daily after the evening meal for two to three days. Provided no untoward reaction developed and the patient's symptoms were not relieved, dosage was increased to 50 mg. twice daily; then after one week dosage was increased to 50 mg. t.i.d. p.c. When a dose of 50 mg. Benadryl was associated with untoward symptoms, the dose was reduced to 25 mg. or to 10 mg.

Each case must be studied for maximal response to dosage that does not produce side actions. We have observed therapeutic benefits from dosages varying from 30 to 150 mgm. daily in divided doses. Some patients respond best to evening medication but most patients may take Benadryl in divided doses throughout the day.

Forms of Medication

Benadryl has been used by us in the following dosage forms:

1. In powder form; 50 mg. capsules.
2. In Elixir form; 10 mg. per dram.
3. In sterile solution for parenteral use; 10 mg. per c.c.

There are advantages and disadvantages in each dosage form of Benadryl which will be discussed in a subsequent paper. For the present we have used one or all at the same time, with the same clinical results. The Elixir is preferable in treating children; parenteral medication is advisable when gastro-intestinal symptoms manifest themselves.

Side Actions

In this series of eighty-seven cases, the untoward symptom most frequently complained of was mild drowsiness lasting from one to one and one-half hours. Occasionally severe drowsiness lasting eight to twenty-four hours made patients apprehensive. In a few cases nausea was experienced but this soon wore off and was then not bothersome. Several patients complained of mild bladder disturbances, such as frequency and discomfort.

All patients who have had side effects while receiving Benadryl have been studied as to blood pressure levels. Most of these patients presented a hypotension with drowsiness. Therefore, a stimulant in the form of Amphetamine Sulphate was used. Dosage of this medication depended on systolic pressure. Those patients in whom the reading was below 110 systolic were given 5 mg. of Amphetamine in the morning repeated at noon when necessary. In those whose systolic blood pressure was above 110, 2.5 mg. of Amphetamine was used once or twice daily. This therapeutic

TABLE III. CLINICAL RESULTS WITH BENADRYL IN TWENTY-EIGHT CASES OF VASOMOTOR RHINITIS

Name	Sex	Age (yrs.)	Duration of Illness (yrs.)	Skin Tests	Length of Treatment	Dosage	Side Reactions	Results
J.B.	F	16	1	none	2 mo.	50 mgm. daily	none	symptom free
M.B.	M	59	10	none	3 mo.	50 to 150 mgm. daily	drowsiness	improved
V.B.	M	37	16	pollens foods positive	2½ mo.	50 mgm. daily	weakness and drowsiness	symptom free
H.L.	M	34	17	none	2½ mo.	100 mgm. daily	none	symptom free
M.M.	M	38	3	none	3 mo.	150 mgm. daily	drowsy	symptom free
N.P.	M	17	2	foods pollens positive	3 mo.	150 mgm. daily	drowsy at first	improved
A.P.	F	47	12	foods pollens positive	2 mo.	100 mgm. daily	dizziness at first	improved
J.W.	F	20	6 mo.	foods positive	3 mo.	50 mgm. daily	drowsiness at first	no improvement
R.J.A.	M	46	10	none	2 mo.	150 mgm. daily	none	improved
F.B.	M	63	10	none	4 mo.	200 mgm. daily	none	improved
R.C.	F	33	9	house dust positive	2 mo.	50 to 150 daily	none	improved
J.C.	M	69	2	none	2½ mo.	150 mgm. daily	none	improved
L.F.	M	61	40	none	5 mo.	100 mgm. daily	none	improved
L.F.	F	33	1	foods positive	2 mo.	150 mgm. daily	none	improved
I.G.	M	25	8	none	3 mo.	150 mgm. daily	none	symptom free
J.G.	M	49	27	dust positive	3 mo.	150 mgm. daily	nausea at first	improved
F.K.	F	35	16	foods pollens positive	3 mo.	150 mgm. daily	none	improved
J.K.	M	2	2	negative foods	3 mo.	50 mgm. daily	none	symptom free
A.K.	M	48	3	none	2 mo.	50 to 150 mgm. daily	none	improved
C.L.	M	58	7	foods pollens positive	4 mo.	50 to 150 mgm. daily	nausea at times	improved
S.L.	F	17	2	food epidermals positive	3 mo.	150 mgm. daily	sleepy at first	improved
A.M.	F	50	6 mo.	foods epidermals positive	1 mo.	50 to 150 mgm. daily	drowsy	no results
A.M.	M	30	2	foods positive	6 weeks	150 mgm. daily	none	no improvement
M.P.	F	23	2	fall pollens positive	2 mo.	150 mgm. daily	none	symptom free
N.P.	M	17	2	foods pollens positive	2 mo.	50 to 150 mgm. daily	none	improved
L.R.	M	12	1	foods pollens positive	2 mo.	50 to 150 mgm. daily	nausea and drowsy at first	improved
M.S.	M	45	7 mo.	house dust positive	2 mo.	50 to 150 mgm. daily	drowsy at first	improved
E.W.	F	21	10	none	4 mo.	150 mgm. daily	none	feels worse

agent apparently acted favorably in overcoming all side effects of Benadryl, including bladder disturbances.

Most allergic patients present more than one manifestation of allergy; further study is necessary to evaluate all steps in their management with Benadryl. However, this preliminary report reveals that Benadryl has proven of great help in treat-

ment of certain types of allergy. Best results were obtained in hay fever, and vasomotor rhinitis; clinical results in asthma were less favorable. None of our cases developed serious toxic reactions.

In a subsequent report the entire series of cases of the present group, plus additional cases that may be added, will be covered as to the following statistics: Age, Sex, Complaint, Diagnosis, Duration of Treatment, Results, Untoward Reaction and Management of Same.

Conclusion

In conclusion, we present our findings concerning a new treatment for allergy, in the form of medication called Benadryl. We have covered the following subjects:

1. Theory
2. Nature of the Drug
3. Types of Cases Treated
4. Case Reports
5. Statistics of a Group of eighty-seven cases
6. Dosage
7. Results
8. Complications and Their Management

206 Professional Bldg.
10 Peterboro
Detroit (1), Mich.

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MSMS

PANTS

There are certain events in this valley of strife
That provide our starved souls with a thrill
For they serve us as landmarks the rest of our life
In this sphere of monotonous drill.

But of all such events that will raise a man's hope
And that no other thing quite supplants,
For it gives a sick man such a boost up the slope,
Is the day he gets back into pants.

CHARLES G. FARNUM, M.D.
Illinois Journal, April, 1946.

Therapeutic Abuse of Thyroid Substance

By William S. Reveno, M.D.
and
Robert C. Moehlig, M.D.

Detroit, Michigan

IN THE THIRTY YEARS that have elapsed since the isolation of thyroxin by Kendall, many important studies and much valuable experience have been recorded regarding this agent and the thyroid substance from which it is derived. Clinical application of this knowledge at first followed the investigative effort at a respectful distance, due regard being displayed for the demonstrated potency of the agent in use. With the passage of time, however, an increasing impunity for the dangers involved and an almost total disregard for the basic criteria have replaced the earlier caution. Now it is quite ordinary to prescribe .2 gm. (3 grs.) or more daily for an indefinite period on the sole basis of a complaint of tiredness and a single basal metabolic rate determination; and, as favorable response fails to materialize dosage is increased in some instances up to 6.2 gm. (10 grs.) per day and continued at this level indefinitely as long as the patient registers no complaint. Occasionally the physician may be puzzled by the early development of a generalized myalgia in patients with actual hypothyroidism who have had too much thyroid. This reaction to overdosage, indicative as it is of the small amounts of thyroid substance necessary for the control of a specific disturbance, emphasizes the need for lifting prescription writing for this potent agent from the automatic to the conscious level.

This tendency towards overdosage and its attendant disregard for consequences has other important implications. Not only is it slovenly therapy but it indoctrinates the thyro and the borderline practitioner who practices by ear with the idea that use of thyroid substance (and other positive acting drugs) is attended by all gain and no risk. This unhealthy trend was pointed up by the following experience and stimulated the present discussion:

A white man, aged forty-seven, was started on .4 gm. (6 gr.) thyroid daily because of sexual impotence and the finding of a BMR of minus 30

From the Department of Medicine, Harper Hospital and Wayne University College of Medicine.

per cent. After six weeks his original complaint was completely forgotten, having been replaced by nervousness, insomnia, palpitation, sweating and weight loss. In spite of discontinuing medication, the disturbance continued during the next three months and was only finally terminated after six weeks of thiouracil therapy.

A second patient, a white man, aged thirty-eight, complaining of tiredness and backache and found to have a BMR of minus 40 per cent, was given .2 gm. (3 gr.) thyroid daily for the next six months when he developed palpitation, nervousness and weight loss which continued in spite of discontinuing medication. After another four months auricular fibrillation developed. The induced hyperthyroidism was in this instance also finally controlled with thiouracil.

Though these instances are extreme, they are the results of an all too common practice which must produce disturbances in function and inter-relationship, if not in structure, of many body tissues and organs. These are often unrecognized because they remain at a subclinical level.

It is apparent that the therapeutic virtues of thyroid substance have been emphasized so strongly as to overshadow its harmful potentialities and create carelessness in its administration. Perhaps a review of the better known actions of this many-sided agent may serve to restore a semblance of balance with a fuller appreciation of its potency.

Effect on the Pituitary

First it is necessary to bear in mind that the thyroid is a target organ even though its power and influence over other organs and tissues is impressive. It is far from autonomous, depending for its smooth functioning on the good will and co-operation of a number of satellite organs, and looking to the anterior pituitary gland as its guiding star. Disturbance in this latter relationship has a most important bearing on the general body economy and should accordingly be discussed first.

In the reciprocal relationship between the thyroid and the pituitary, the thyroid secretion affects the pituitary as strikingly as the thyrotropic hormone affects the thyroid. A reduction in the amount of thyroxin stimulates an increase in thyrotropic principle which causes hyperplasia of the thyroid acinar epithelium. At the same time the basophils in the pituitary become of maximal size, are increased in number and show vacuolation—the so-called "castration" or "thyroidectomy cells." Excess thyroid secretion or feeding on the other hand, causes enlargment of the acidophiles with increased brilliance of the granules and hypertrophy of the golgi apparatus and mitochondria. The basophiles, however, appear to be affected in the same manner as in undersupply of thyroid secretion. In the neural posterior lobe or in the diencephalon-hypophyseal system, there is an increase in posterior lobe secretion (pituitrin). At the same time hyperemia of the entire pituitary gland takes place.

Translated into effects, the hyperemia of the gland and the stimulation of the diencephalon-hypophyseal system may well account for the headache, nervousness, insomnia, sweating, polyuria and polydipsia, and, in extreme instances, the hypertension and glycosuria that may follow excess thyroid feeding. The evidence seems to point to a derangement of the vegetative nervous system of varying degree and permanence due to its vulnerability to thyroxin.

As for the effects of the changes occurring in the anterior portion of the gland, these may be both immediate and remote. Prolonged dioestrous and persistent functional corpora lutea have been noted in rats and may explain the various menstrual derangements, oligomenorrhea, irregularity, and amenorrhea, occurring with long continued thyroid feeding.

The most significant though remote effects are those involving the connective tissues of the body. In the liver, changes resembling early cirrhosis and interlobular hepatitis may develop. In the osseous system osteoporosis with increased calcium excretion can occur. Acceleration of bone growth may take place in the young. The muscular system may suffer through the development of weakness or hypotonia. All of these disturbances may of course exist at a subclinical level remaining unrecognized but producing cumulative damage nevertheless.

Effect on the Liver

Mobilization of liver glycogen is known to follow thyroid administration. In the presence of a small extra amount of thyroid hormone the tendency of the liver to discharge sugar is increased. This is probably brought about through sensitization of the liver to stimuli which promote discharge of glycogen.

Long continued action of this sort can readily result in liver glycogen depletion of varying degree. If small amounts of extra thyroid are taken this depletion is not complete, but with large

amounts the depletion is more complete and the action of insulin is accentuated to the point of production of hypoglycemia. In any event, the constant interference with glycogen storage in the liver and the constant leakage of glucose into the blood stream is far from wholesome to the body economy and can eventuate in serious disturbance of the carbohydrate metabolism.

Effect on the Adrenal

It is generally believed that an excess of thyroid hormone either stimulates the production of extra adrenalin or sensitizes the body tissues thereto. Depletion of liver glycogen mentioned above is a direct result either of increased sensitivity or exposure to greater amounts of adrenalin. Increased sensitivity of cardiac muscle to adrenalin with development of anginoid symptoms deserves serious consideration when long continued administration of thyroid extract is contemplated.[1]

An antagonistic relationship exists between the thyroid and adrenal medulla. Hypertrophy of the suprarenals following the administration of thyroid substance has been observed and this may be interpreted as a compensatory attempt to inhibit the activity of the thyroid. This reaction is responsible for the difficulty in eliciting symptoms of hyperthyroidism by feeding thyroid to an animal with an intact thyroid gland.[1] If continued over an extended period it could constitute an important factor in the development of myxedema in patients in whom long-continued thyroid feeding was suddenly stopped. Another factor in this paradoxic development might well be the tendency of the thyroid gland to become inactive during the administration of thyroid substance.

Effect on the Pregnant Woman

Irreparable damage to the brain of the fetus, resulting in mongolism, may result from overdosage of thyroid substance to the pregnant mother. As an example, a woman, aged twenty-eight, who had been on .65 gm. (10 gr.) of thyroid daily for a period of ten years became pregnant and continued to take the same dose until full term. Delivery was normal, but the child was a Mongolian idiot. We feel that the excess thyroid caused damage to the central nervous system.

This same experience was repeated in another young woman, a nurse of twenty-six, who took 0.325 gm. (5 gr.) daily during her pregnancy and the child was a Mongolian idiot. Such large doses of thyroid seem uncalled for and the effect of overdosage on the pituitary and thyroid of the fetus, in the light of experimental and clinical studies, would indicate that the effect is a deleterious one. The natural consequence of the fetal thyroid and pituitary disturbance induced by thyroid substance overdosage could well be the clinical condition Mongolism. We are not of course stating that Mongolism is always caused by the administration of thyroid but feel that this drug may, by overdosage, produce fetal thyroid and pituitary changes with resulting damage to the brain and other tissues. Changes in the pituitary have been repeatedly demonstrated in Mongolism (Benda), and it is interesting to note that feeding of large doses of thyroid have resulted in changes in the pituitary similar to those found in Mongolism. Certain it is that one must be cautious in the administration of thyroid during pregnancy.

Effect on Growing Children

Another field where the abuse of thyroid is widely prevalent is in that of pediatrics. In growing children, comparatively large doses, .065 (1 gr.), over a period of time results in a negative calcium balance. This produces osteo-porosis with lordosis, kyphosis and scoliosis. Further, thyroid is often prescribed whenever it is felt that an endocrine condition is present no matter what gland is primarily at fault. Obviously such chance prescribing carries with it a certain amount of danger.

Effect in Obesity

The error in depending on thyroid substance for weight reduction in the obese is now quite generally recognized (or is it?). Wilder[2] has stated the case so succinctly that his words are worth quoting:

"When an adult man or woman adds to his body weight his BMR remains within what are called normal limits; that is to say, the calories per square meter of surface are unaltered. Actually they may be moderately increased, but the important consideration is that the number of square meters to be reckoned with increases, and as the surface enlarges, the total basal heat production increases materially. At the same time the muscle mass and the size of the organs, with the possible exception of the heart, remain as they were before weight was gained. The increase in surface is attributable exclusively to adipose tissue, and since such tissue is very inert chemically and contributes only meagerly to the increased change of energy, the extra metabolism is nearly all thrown on the unchanged mass of muscle and organ. It formerly was supposed, incorrectly, that the metabolic rate was lower than normal in obesity. The contrary is the case; the metabolic rate of the chemically active tissues of the body, its muscle and organ mass, is in-

creased to a degree which is quite as great as we ever encounter in goiter. Incidentally, this is a very good reason for not using preparations of thyroid in the treatment of obesity."

Summary

The abuse of thyroid substance is quite widespread and is fraught with risk to the patient. It is ordinary experience to find as the sole basis for its administration any one of a wide variety of symptoms or complaints combined with a low BMR, too little thought being given to the fact that the basal metabolic rate is not the sole measure of thyroid activity. Improvement that has followed in some instances has stimulated trial treatment in more and more patients with unwarranted increase in dosage and a growing disregard for consequences.

Among the recognized ill-effects of overdosage are: (1) induced hyperthyroidism; (2) potential derangement in the vegetative nervous system; (3) changes in the connective tissues of the body such as have been noted in the liver; osteoporosis and increased calcium excretion; and muscular hypotonia and weakness; (4) disturbances in menstruation; (5) interference with carbohydrate metabolism by depleting the liver of its glycogen; (6) sensitization of tissues to adrenalin; (7) hypertrophy of the adrenal medulla with compensatory suppression of thyroid activity; (8) inactivity of the thyroid gland, with development of myxedema upon cessation of thyroid feeding; (9) Mongolism; (10) dangerous increase in the metabolism of active body tissue in the obese.

When it is recalled that normally the function of the thyroid gland is to maintain the level of thyroxin in the body at 14 mgm. (or 70 grains thyroid substance), or to elaborate 0.33 mgm. (approximately 1.6 gr. thyroid substance) of thyroxin daily, and that the gland can be largely resected and the remnant still continue to deliver the normal amount of thyroxin, the wastefulness of large doses becomes clearly evident.

In this discussion the intent has been not to deny or discount the value of thyroid substance as a therapeutic agent. Rather has it been the purpose to recall the real and potential ill-effects of overdosage and to discourage the tendency to give thyroid substance when in doubt, stepping up the dosage in the hope that if a little is good a lot is proportionately better.

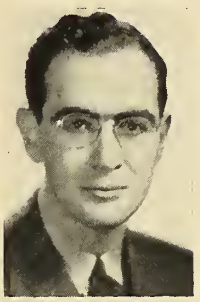
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Adoption Procedure and Medical Practice Under the New Law

The Role of the Physician

By David Feld, M.D.
Detroit, Michigan



WITH ever-increasing frequency, the physician is confronted with the problem of patients desiring children to adopt. If he is not only an ethical but also a conscientious doctor, the problem is almost too overwhelming in its complexity for him, as a single individual, to solve. The facts of the situation are multiple, and, therefore, numerous factors have to be clarified. Moreover, because of the great confusion that has previously existed regarding the adoption of children, and because of the many "shady" adoptions that have been perpetrated in the past, the need for more comprehensive legislation to help solve the difficulties became apparent. The result was Michigan's new and, as far as can be foreseen, excellent adoption law.

The prevalence of involuntary sterility is great. It is generally estimated that one in every eight or nine couples is sterile against its will, and that there are in this country two or three million married couples of reproductive age desirous of children but unable to have them. Many such couples present themselves to the physician for help in their problem. The thorough doctor will do careful diagnostic studies on these sterile couples to determine their fertility index. Some of them will be absolutely sterile. In others, given even a low fertility index, attempts are made to achieve a pregnancy. The attempts are usually given thorough and prolonged trial, sometimes without a gratifying result. It is in these, and in the absolutely sterile couples, that the solution of the problem ultimately resolves itself into the adoption of a child.

Most couples come to this end of their long sterility—or fertility—survey with some reluctance. The reluctance varies in degree with each indi-

Address given at the Joint Annual Conference of the Michigan Welfare League and Michigan Mental Hygiene Society, Hotel Statler, Detroit, November 16, 1945.

vidual couple. However, when the average sterile couple accept the conclusion of their own sterility and the necessity of adoption in order to have any children, they are by this time usually very anxious to get an adoptable child. Much time has been spent in a thorough sterility study; they have already waited some time before they undertook the study, and they are now most impatient. To further complicate the problem, it is estimated that there are ten prospective adopting parents for every one adoptable baby.

Somewhat naturally, many sterile couples look to their physician to find a baby for them to adopt. My natural reaction is to refer them to the proper agencies for information and help concerning this entirely different phase of the sterility problem. The physician rightly believes that he is the one most competent to deal with the medical aspects of a sterility problem. By the same token, he should be the first to acknowledge that the social agencies and the courts are the most competent to deal with the social, psychiatric, and legal intricacies of an adoption. Under the wise provisions of the new law, the physician will be doing his patient a great favor by seeing to it that she is referred to the social agencies for the solution of her adoption problem. Only in this way can the legal, medical, and social traps of an adoption be avoided.

Medico-Legal Aspects of Adoption

The new adoption law sets up a definite legal procedure which protects the inherent rights of the natural mother, the child, and the adopting parents. In addition, it tries to eliminate the possibility of shady adoption procedures which attempt to circumvent the adoption laws.

There have been instances in which pressure has been placed upon a natural mother to give up her child for adoption when such may not have been her primary desire. This has not infrequently occurred when a not too scrupulous or ethical doctor delivers a patient, who, he believes, because of certain economic or social pressures, could be induced to place her child for adoption. Such a physician usually has another patient who is very desirous of adopting a child. Because of a forthcoming, and lucrative, fee from the adopting parents if such a deal could be engineered, it is attempted. All the natural mother might want in this case is some help in making necessary arrangements to keep her baby. This help the social agencies are glad to render. The natural mother may not realize this fact, and under the above circumstances, no social aid would be forthcoming to help her realize this. Moreover, if such an adoption were attempted, all parties involved might get into difficulties later after the child had been theoretically "adopted." Frequently, such adoptions are not legally foolproof. The natural mother might "change her mind" later on; the doctor can get into trouble because of his involvement and acceptance of the large fee; and the adopting parents may have to give up the child after becoming quite affectionately attached to it. Such cases have been called to my attention, and I am sure, to yours.

The legal machinery of the new law attempts to eliminate such happenings. The natural mother must, through a very definite procedure, signify her desire to place her child for adoption. Her natural rights to the child are terminated permanently.

The elimination of these problems assumes that the machinery of the law is employed. Very frequently the doctor finds himself the middleman in an adoption procedure. He may have a patient very desirous of adopting a child, and he may have a woman very desirous of having her child placed for adoption. The doctor may be most ethical and conscientious in his wish to further the interests of both patients. He may try to consummate such an adoption very legally, without the questionable purpose of merely trying to get a big fee. However, he may rightly expect to be paid for his services. If such a procedure is not done strictly according to the law, his fee, if not approved by the probate judge, is an illegal receipt of money for an adoption. The physician is thereby involved in a legal tangle, of which he had no previous conception.

The doctor, however, may frequently find himself with an adoptable child and very desirable adopting parents, both of the involved parties still being his patients. In such circumstances, he may rightly wish his patient, the adopting parent, to have preference in getting this adoptable child, whose natural mother is also his patient. It would be to his great safety and advantage to accomplish this adoption through the authorized channels. I am sure that the social agencies would be glad to co-operate with him in this request, if all other factors are approved, and see to it that his patient received this particular child.

Medical Aspects of Adoption

The new adoption law, if followed, provides for a great margin of medical safety. The thorough investigation of the child's physical and mental status before placement, and the one year waiting period give the adopting parents a great deal of security in that they will not be saddled with an inferior child. If, during the one year waiting period, the child seems inferior in development, the adopting parents are not bound to keep him.

Previous to this new law, there were innumerable instances wherein adopting parents took a questionable baby, sometimes a supposedly normal infant, without any previous investigation. Not having the one-year waiting period, or being afraid to wait for fear of losing the baby due to some hitch in the legal proceedings, the child was adopted immediately. As time went on, and the baby turned out to be subnormal in either physical or mental development, the adopting parents were bound to the child legally and emotionally. Years of anguish, heartache, expense and responsibility followed. Many of these adoptions were sponsored by doctors, who then not only regretted them, but also were blamed for them. The doctor is no soothsayer, nor should he take it upon himself to play that role. He should be the first to recognize the importance of thorough investigation of the baby, and of a waiting period to verify the infant's normal development. Unfortunately, in his sincere wish to be of service to his sterility patient or an adopting parent, he frequently forgets or neglects this important phase of the adoption. He wishes to help his patient as quickly as possible. The new law, in putting a check rein on his enthusiasm, will also be doing him a great service, and will protect him against later and possibly life-long recrimination.

Social Aspects of Adoption

This phase of an adoption investigation does not belong to the doctor. I do wish, however, to mention it since the doctor so often tries to usurp this domain in his adoption efforts.

When the average physician has some specific adopting parents for whom he is trying to obtain a baby, the only prerequisite the doctor usually considers is his patient's economic ability to care for a child. This is indeed an important factor, but only one of many. I am firmly convinced that the adopting parents' social and psychiatric development, and their background in a broad cultural sense, are extremely important, as well as their physical and mental health.

The physician most certainly does not have the time or the means available to check all these factors. Frequently he does not have the interest or the vision to realize the great part these factors play in the ultimate development of the child. Since the physician's adoption investigations would most probably be quite narrow, I feel that he should not be an agency in his own eyes, or consider himself capable of deciding upon an adoption placement. Moreover, I have seen and taken care of sterility patients, who, in my private opinion, would have made poor parents because of poor psychiatric and social development. I am personally pleased, therefore, to have adoption decisions taken out of my hands and placed in the hands of the social agencies. I feel that patients will more willingly accept an agency's decisions as more impersonal and just than my own. A patient can be made to realize the amount of investigation which substantiates the judgment of a social agency. An agency can camouflage more readily the reasons for its rejection of certain applicants, in favor of more desirable adopting parents, than the doctor can possibly do.

As I have already intimated, the lack of a careful social investigation can be disastrous. Race, creed and color of both child and adopting parents should be carefully investigated and matched as closely as possible. I have heard of many cases where the parents, and sometimes the child in later life, have suffered severe mental trauma because of the discovery of a great mistake in race, creed or color.

I am sure that you have gathered from my remarks that I am greatly impressed and pleased by Michigan's new Adoption Law. I think it gives promise of working out splendidly, if only given the co-operation in all ways that it merits. I, for one, am delighted to turn over to the social agencies and to the courts a problem which is rightfully in their own field!

MSMS

Little Joe Genius says—

I see that Mr. Dingell says that the national health bill has been "subject of more wilful misrepresentation and misinformation than any other piece of legislation" in his thirteen years in Congress. I agree with him.

I see Mr. Ickes, the old curmudgeon, is in favor of the new version of the national compulsory health bill, but admits he hasn't read the bill *in toto*, nor can he remember what parts he has read.

Cancer Education in a Rural Area

By Albert E. Heustis, M.D., M.P.H.†
Coldwater, Michigan



COMMUNITY planning for health education in the field of cancer has been uniquely demonstrated in a rural Michigan county. To the best of our knowledge this is the first time that physicians, lay groups, teachers and school children have worked together in a co-ordinated rural program of cancer information.

The idea originated with L. E. Davidson, publisher of the *Coldwater Daily Reporter,* who offered to provide the financial backing. He sought the advice of the Cancer Consultant of the Michigan Department of Health and asked the County Health Department to participate.

A planning meeting was arranged and several interested citizens met with representatives of the County Medical Society. The consultant presented his idea of a continuing cancer education program and the Director of the County Health Department was elected general chairman.

The objectives established were to induce those with suspicion of cancer to consult their own physicians early and to provide the doctors with help in establishing the diagnosis of early cancer.

The first step was to tell the story of cancer—what it is, and what can be done about it. This was designed both to provide general information and to remove the fear which has so often stood in the way of an early diagnosis. It was directed at every person in the county through the schools and through others who would read or listen.

The State Consultant prepared a series of brief, factual, understandable articles on "The Story of Cancer," which were prominently featured on the front page of our local paper. In addition, both the Consultant and the entire staff of the County Health Department made themselves available for group discussions. Our health educator was of great help in arranging the schedule. She canvassed the community groups and worked through their program committees. The Farm Bureau, granges, service clubs, mother's clubs, study groups, parent-teachers' associations, and township organizations were brought into the plan. For the most part the talks given were illustrated with slides or movies and in each case supplemental printed material was available for distribution.

The libraries participated in the project by the display and circulation of cancer information.

In the schools the program started with a series of five two-hour illustrated talks for high school science teachers. These were later expanded to include anyone who was interested. Four of the sessions were given by the Cancer Consultant while the fifth was presented by several members of the Medical Society.

Next, in the school plan, came a number of single talks to high school students at assemblies and in certain classes. These were frequently illustrated, time was allowed for discussion and printed material on cancer was made available to supplement the basic facts presented. Moreover, instructional units were given to high school teachers for use in their classes.

The final step in the school program provided for distribution of literature on cancer to every student in every school. This material was intended for the parents as well as the pupils. Extra copies were made available for distribution to homes not represented by the school children.

The portion of the program designed to help the doctors was developed into a Cancer Teaching Day. Cases suitable for operation and certain diagnostic problems were assembled by the local medical men and three qualified and capable specialists were invited to come out from the state university and spend an entire day in our rural hospital. These included a gynecologist, a general surgeon, and an internist. The morning was given over to an operative clinic of three cases and ward rounds, while a general tumor conference of seven cases was held in the afternoon. In the evening, the visiting doctors presented illustrated talks on "Cancer" at a dinner meeting of the Medical Society to which physicians from the surrounding territory were invited.

The fine public spirit of our local newspaper publisher served both to crystallize public sentiment about our cancer problem and to focus it into an active, protective, participating program. It could not have been done as completely or as effectively without his genuine interest.

†Director, Branch County Health Department, M.D., University of Michigan 1936. Four years Department of Surgery. M.P.H., Johns Hopkins, 1942. Monroe County Health Department until July 1, 1945.

The Strength of Unity

Throughout the centuries man has been beseiged with periods of restlessness which try his soul, and they occur most often in the wake of war. He seeks change in order to escape dilemma; sometimes for his own good, while on other occasions he may take a stand shaded with disappointment because too little thought has been given to where the new course will lead.

Perhaps no group of individuals has kept up with the progress of time more thoroughly than the medical profession. It has been careful to weigh its shortcomings, and has been first to make way for promising new methods, yet slow to accept the unknown until there is sufficient evidence of correctness to warrant approval. The average practitioner cannot now see the necessity of overthrowing all the results of the many years of experience and progress, together with all the advantages gained by the public from careful evaluation of medical economic problems for something unknown; for ideas of service that, because of their complexity, will take years to work out, if ever. When future health service plans are perfected for public approval it is certain the medical profession will be in the lead.

Purveyors of the idea of controlled medicine would like nothing better than to see discord within our ranks. They fear solidarity of purpose. Fortunately for the people of this country there is unity within the society of doctors of medicine, and at no time in the history of this nation has it been so important that unity of thought and purpose should prevail.

With the help of organized medicine level headed leaders in the United States Senate are bringing forth proposed legislation to co-ordinate the health functions of the Federal Government in a single agency, together with some other provisions to expand the activities of the Public Health Service. The medical profession can well support this type of legislation for it follows our ideals, and ideas of service which can be offered to protect the public from the sting of catastrophic illness, without the drawbacks a compulsory system is sure to bring. The strength of 170,000 doctors of medicine is being felt. The newly proposed legislation has a good chance of passage, and let it be the answer to proponents of political medicine.

H. Monish

President, Michigan State Medical Society

President's



Page

Editorial

IS THIS STILL AMERICA?

We are reprinting on page 740 an editorial from the *Rocky Mountain Medical Journal* giving specifically the background of the Wagner-Murray-Dingell Bill now being considered by Congress. These facts have been printed in less detail before, but we are busy people and are apt to forget. Also about 40 per cent of our members have been in the war service, the military forces, and not in direct contact with what has been transpiring here at home. Those of us at home have been too busy taking care of our own work, and the patients of our absent confreres to have time to keep abreast of the undercover happenings.

America was settled as a place of refuge, a place of freedom of worship, of freedom from government controls, a place of *liberty*. Our forebears came to this land to escape regimentation and compulsion in many of their life ambitions. They wished opportunities they could not get at "home." They wished for their children freedoms and release from restraint which during the ensuing centuries have made this the most advanced, the healthiest, the most prosperous nation on the globe. Their children and their children's children have attained a standard of living never before attained in this world. This has been accomplished through opportunities of action and advancement restricted only by lack of ability.

But now foreign ideologies are being insinuated into our beloved land. A new theory of life is offered. All must be guaranteed "SECURITY." They must be guaranteed freedom from worry, a guaranteed income during old age, health services at the expense of the government. Our forefathers who made this country of ours scorned such mollycoddling. They demanded and made for themselves opportunities to work and provide for their families the advantages they wanted. They cut the timbers, tilled the soil, worked the mines, built the roads and railroads; they hewed out their own salvation, and in doing so built the most advanced nation time has ever seen.

Now we are told this is all wrong. We must have "compulsory" old age pensions. We must have "compulsory" unemployment insurance. We must have "compulsory" personal health insurance. These things have come to us as the trend of social development. We are told this last addition to the compulsory things we must have is not socialized medicine, but the very vehemence with which the proponents deny the facts shows their appreciation of having trod very close to the edge.

The persistence with which the social-minded groups have grasped this attempt to socialize and to dominate the rendering of medical services *to the people who can pay* raises a question of the real reason. Is it the unadulterated urge to do good that inspires them? If so, why neglect the indigent in the compulsory service group? Is it a desire to build a bureaucracy in the hope of furnishing medical services to those who already can and do get what they want of medical services? The proposed plan would set up great bureaus to fatten on the needs of the sick of the nation. They would not provide a single additional doctor to do the work, but they would place the doctors now in practice under a control which would limit their ambitions, and amount of work. They ostensibly would allow him independence to choose which patients he would serve. He could still do private practice if he could find any patients. By the lack of private patients he would be regimented to do the work of the bureaucrats.

Have these political control artists given us a fair deal? They have restricted debate on this bill to include only nationally organized groups. State medical societies who wish to be heard may write out and submit briefs. They will then be published in the hearings so that anyone who wishes may read. The American Medical Association was given one day. Have these politicians given the humble public, the person who needs a doctor, and wants his own doctor, any chance to be heard? No. They are not nationally organized. Unfortunately the most interested person or group in matters of health service might just as well not exist. He has no voice.

Politics does strange things. It makes jobs out of heartburns. It perpetuates itself by finding new avenues and new dogmas. Has the time arrived when we must face the facts of the inadequacy of the American People to provide for themselves? We feel it has. We feel the great majorities of our

people must awaken to the imminent threat of compulsion being thrust upon them by wire-pulling off-stage minorities.

SCIENTIFIC CONFUSION

George Meany, Secretary of the A.F. of L., describes the new wage-price regulations as "Scientific Approach to Confusion." He protests that "the administration has loaded the dice for its favorites while framing the rules against the balance of the nation's workers."

A representative of the A.F. of L. (Crookshank) told the delegates at the recent Conference on Medical Services in Chicago that the union recognises the ability of the doctors to give good medical care, to know what to do for a sick worker, but they do not trust the medical profession to handle the financial details of rendering such services, and they propose to take that away and by law. He boasted that the A.F. of L. had largely written the Wagner-Murray-Dingell Bill and they were going to see that it was enacted into law. The considered program of the union is to regiment medicine. They demand to be heard when their wages are in dispute, but deny the medical profession the same right.

Has the A.F. of L. read about the recent troubles the Veterans Administration ran into in attempting to provide medical care of the veterans in that assay into political medicine? Civilian medical service came to the rescue. How about the greatest attempt to give medical services to fifteen million military men? Were the doctors' services used to anywhere near the efficiency shown by civilian doctors during the same emergency?

These are two examples of "scientific confusion" in an attempt to render medical services by political methods. Do the American people want to extend that to the whole nation? We hope the elements who are asking for this political travesty will not be sorry when this confusion strikes. It will hit them, too, you know!

WAGNER-MURRAY-DINGELL— A SERVICEMAN'S VIEW*

The Wagner-Murray-Dingell Bill is a legislative answer to an indictment of American Medicine. It was conceived by the social planners on the assumption that the government, using the same physicians who now operate as individuals, can, by superior administration and by government financing, provide for the people of this country a better grade of medical care and a better distribution of medical care than now exist.

In drawing up their bill of complaint against the existing order, it was entirely proper that the proposers of this measure take cognizance of any failure on the part of physicians to provide for the health of the citizenry. The record of American Medicine has accordingly, and properly, been laid bare to the scrutiny of all who care to see. For good measure, the results of defects in our nation's housing program, faults of rural sanitation, and failures of our civilian economy have by some obscure process of reasoning been added to the alleged sins of the private physicians. All of these things are advanced as reasons why the government should administer medical practice.

But the government also has a record in the field of medicine. Federal and State agencies have been in the business of providing for the health of a large number of our citizens for some time. Since the advocates of government medicine base their proposal on the assumption that the government can do a better job than is being done, it might be well to inquire how well the government has performed in the provision of medical care in the past.

We could, for instance, look into the record of the Veterans Administration, the EMIC, or various state hospitals for the care of the insane. But let us observe a recent and extensive government excursion into the practice of medicine, the administration of the Medical Corps of the U. S. Army.

Before the expansion of the Medical Department in the late war, the Medical Corps became a part of the service forces. This placed medical professional service under lay control, a situation analogous to the proposal in the Wagner-Murray-Dingell Bill.

The results of this reorganization are well known, not only to physicians lately in the army, but also to thousands of patients who had ample opportunity to observe what happens when doctors take orders from laymen. The professional achievements of Army Medicine were, of course, splendid. The Surgeon General has recently given full credit for this accomplishment to the American civilian physicians who largely officered the Medical Corps, and to the superb and devoted enlisted personnel

*This editorial was written by a returned serviceman known for his deep and medically economic thinking. Obviously his name cannot be signed to it.—Editor.

who did a large share of the work. But what did the lay control of Army Medical Administration accomplish? The following is but a partial list of their triumphs. It might be extended indefinitely.

Administration by the Service of Supply produced more "spit and polish" in the medical units than formerly existed.

It provided a pool of enlisted manpower which could be raided by other branches whenever they thought a raid expedient. On the eve of at least one invasion, hospitals were called upon to send enlisted men, who had been laboriously trained to do certain essential medical jobs, to act as cooks to certain field units.

In the Zone of the Interior, it introduced the Army medic to bureaucracy in full bloom. There was the Civil Service employe in hospitals who frequently did as little work as possible in an eight-hour day; laid off whenever the fancy struck him, was impartially impudent to ward officer and patient, collected more than double the pay of the enlisted men and women who did most of the work, and was practically undischargeable. There were, of course, many devoted and efficient civilians, but they had their troubles. If they did their work so efficiently that they could dispense with assistants, they were in danger of having their pay cut because of the rule, "the more people you supervise, the more pay you get."

Then there was the War Manpower Board. The representatives of that commission were all laymen who, armed with a document called a "yardstick," descended on medical installations and decreed that a hospital was a hospital and a ward was a ward whether the hospital or ward had medical patients or paraplegics, and that any ward, so the yardstick said, should have the same number of duty personnel. These administrators also evolved the theory that a "body is a body" and that a decrepit old man who worked forty hours a week should turn out as much work as a husky soldier who worked seventy-two hours.

Then there was the Control Officer, also a layman, who decided how medical records should be kept, and who evolved new "simplified" forms for doctors to execute. This officer also did time studies on various hospital procedures. While he never quite dared to set time limits for operative procedures, he cast covetous eyes in that direction.

We must not forget good old politics. That also went along with lay control of army medical practice. Those things that get the votes were not forgotten, and so a nurse who supervised some seventy-five nurses suddenly became eligible for the same rank as the Chief of Surgical Service who had the responsibility of all surgery and all surgical patients in the hospital; and the newest WAC who had just completed her training as a medical technician might well outrank the enlisted man who taught her.

These are things which happened to medical practice in the army when it was placed under lay administrative control. This is the record of one government adventure in providing medical care. It should serve as a warning to physician and patient alike. *Under lay control, one third of the physicians in this country were able to give excellent care to the most fit one-twelfth of the population,* largely because they overcame the obstacles an inept lay administrative control placed in their path.

WE ARE PROGRESSING

LATELY WE HAVE extensively opposed the Wagner-Murray-Dingell Bill. We still believe that most progress can be made by offering some concrete substitute. The general thinking of medical leaders, the trend of editorial opinion and public relations are gradually tending to a definite medical program. For several months we have published "The Program of Health Legislation Beneficial to the Public" as adopted by the Conference of Presidents and other Officers of State Medical Associations and approved in principle by the House of Delegates of the American Medical Association.

The Council on Medical Service and Public Relations of the American Medical Association is working. Michigan has loaned Mr. Jay C. Ketchum the Executive Director of Michigan Medical Service, to aid in the cause, and he is visiting one state after another with his message.

Senators Taft of Ohio, Ball of Minnesota and Smith of New Jersey have introduced a bill as a substitute for the Wagner-Murray-Dingell Bill which embodies most of the principles we have advocated. Their bill is comprehensive, does not invade state rights, brings all federal health activities under a national health agency headed by a doctor of medicine with Cabinet status, and authorizes the use of voluntary health insurance. The Senators call their proposal "an American plan based on assistance to the needy, liberty to the individual, and a free medical profession."

And our publicity is improving. *Collier's Weekly* on May 11, 1946, published a five-page color-illustrated article lauding Michigan and Michigan Medical Service. It says Michigan's service to the veterans by their own home doctors is working and may be an answer to compulsory state medicine.

The resolution passed by our Council on January 29, 1945, and formulated into a statement of principles, which led to three Conferences of State Medical Society presidents, 17 in Detroit, 10 in Denver and 42 in Chicago, gathers force and power. Our medical public works have finally "made" a national magazine with an outstanding first for Michigan: Veterans' care by their own home doctors."

We believe a satisfactory national health program is in the making, with Senator Taft in the lead.

THE TAFT-BALL-SMITH BILL

At last a concrete and definite effort has been made to furnish a national health program and preserve the independant action of the medical profession. Senators Taft of Ohio, Ball of Minnesota and Smith of New Jersey have introduced a Health Bill to co-ordinate the health function of the federal government in a single agency. The first and most important consideration is to provide adequate and essential health service to the people of the United States. This has been the motive in other measures suggested, the last several going under the name of Wagner, Murray and Dingell, but these have attempted to make the recipient of health service dependent on government dole. They have tried to make the whole matter a government service, the same as police protection, fire protection, et cetera. They are trying to frustrate the fundamental urge of the American pioneer to hew out for himself the things he needed.

The medical profession has sponsored the most of public health, and of health and medical services that could be given, but in doing so endeavors to preserve the independent patient-physician relationship, the right of the practitioner to work where he wishes, and do the kind of work he chooses. Senator Taft and his team have caught the idea, have provided a plan that embodies the principles and theories that have dominated the thought of medicine, and have given us a bill that not only supplies the needs of the people, but which we can enthusiastically support without the fear of a great bureaucracy that will tell our patients how much medicine they may have, when, and from whom.

The sponsors of the bill have made no statement, but the bill encorporates the "Program of Health Legislation Beneficial to the People" as adopted by the Conference of Presidents and Other Officers of State Medical Societies.

ON THE RUN . . .

Quinidine sulphate is effective for paroxysmal auricular fibrillation and/or ventricular premature beats when these are neurogenic.

* * *

The physician who knows what is wrong with the patient and has an effective remedy for it can cut the cackle.

* * *

Tissue necrosis that follows solid freezing is due to vascular deficiency induced by blocking of blood vessels with red cells.

* * *

Artificially fed infants show a high coliform content in the bowel rare in the breast-fed; which accounts for much greater frequency and severity of diarrhea in the former.

—Selected by W. S. Reveno, M.D.

WHAT IT TAKES TO BE A DOCTOR OF MEDICINE

1. Four Years of High School
2. Two Years of College (including Physics, Chemistry, and Biology)
3. Four years in a Medical College
4. One Year's Internship in a Hospital
5. A Knowledge of the Human Body: Its Normal Structures, Functions and Governing Laws
6. A Knowledge of All Common Diseases in Order to Know What Disease is Present
7. A Knowledge of Effective Remedial Agents: Ability to Apply the One Most Needed.

THESE MINIMUM ESSENTIALS SHOULD BE POSSESSED BY ALL WHO TREAT THE SICK

Michigan State Medical Society

Past Presidents 1866-1945

1866—*C. M. Stockwell, Port Huron
1867—*J. H. Jerome, Saginaw
1868—*Wm. H. DeCamp, Grand Rapids
1869—*Richard Inglis, Detroit
1870—*I. H. Bartholomew, Lansing
1871—*H. O. Hitchcock, Kalamazoo
1872—*Alonzo B. Palmer, Ann Arbor
1873—*E. W. Jenk, Detroit
1874—*R. C. Kedzie, Lansing
1875—*Wm. Brodie, Detroit
1876—*Abram Sager, Ann Arbor
1877—*Foster Pratt, Kalamazoo
1878—*Ed. Cox, Battle Creek
1879—*George K. Johnson, Grand Rapids
1880—*J. R. Thomas, Bay City
1881—*J. H. Jerome, Saginaw
1882—*Geo. W. Topping, DeWitt
1883—*A. F. Whelan, Hillsdale
1884—*Donald Maclean, Detroit
1885—*E. P. Christian, Wyandotte
1886—*Charles Shepard, Grand Rapids
1887—*T. A. McGraw, Detroit
1888—*S. S. French, Battle Creek
1889—*G. E. Frothingham, Detroit
1890—*L. W. Bliss, Saginaw
1891—*George E. Ranney, Lansing
1892—*Charles J. Lundy (died before taking office)
*Gilbert V. Chamberlain, Flint, Acting President
1893—*Eugene Boise, Grand Rapids
1894—*Henry O. Walker, Detroit
1895—*Victor C. Vaughan, Ann Arbor
1896—*Hugh McColl, Lapeer
1897—*Joseph B. Griswold, Grand Rapids
1898—*Ernest L. Shurly, Detroit
1899—*A. W. Alvord, Battle Creek
1900—*P. D. Patterson, Charlotte
1901—*Leartus Connor, Detroit
1902—*A. E. Bulson, Jackson
1903—*Wm. F. Breakey, Ann Arbor
1904—*B. D. Harison, Sault Ste. Marie
1905—*David Inglis, Detroit
1906—*Charles B. Stockwell, Port Huron
1907—*Hermon Ostrander, Kalamazoo
1908—*A. F. Lawbaugh, Calumet
1909—*J. H. Carstens, Detroit
1910—*C. B. Burr, Flint
1911—*D. Emmett Welsh, Grand Rapids
1912—*Wm. H. Sawyer, Hillsdale
1913—*Guy L. Kiefer, Detroit
1914—*Reuben Peterson, Ann Arbor
1915—*A. W. Hornbogen, Marquette
1916—*Andrew P. Biddle, Detroit
1917—*Andrew P. Biddle, Detroit
1918— Arthur M. Hume, Owosso
1919—*Charles H. Baker, Bay City
1920—*Angus McLean, Detroit
1921—*Wm. J. Kay, Lapeer
1922—*W. T. Dodge, Big Rapids
1923—*Guy L. Connor, Detroit
1924—*C. C. Clancy, Port Huron
1925—*Cyrenus G. Darling, Ann Arbor
1926— J. B. Jackson, Kalamazoo
1927— Herbert E. Randall, Flint
1928— Louis J. Hirschman, Detroit
1929— J. D. Brook, Grandville
1930—*Ray C. Stone, Battle Creek
1931—*Carl F. Moll, Flint
1932— J. Milton Robb, Detroit
1933—*George LeFevre, Muskegon
1934—*R. R. Smith, Grand Rapids
1935— Grover C. Penberthy, Detroit
1936— Henry E. Perry, Newberry
1937— Henry Cook, Flint
1938— Henry A. Luce, Detroit
1939— Burton R. Corbus, Grand Rapids
1940— Paul R. Urmston, Bay City
1941— Henry R. Carstens, Detroit
1942— H. H. Cummings, Ann Arbor
1943— C. R. Keyport, Grayling
1944— A. S. Brunk, Detroit

*Deceased.

THE 81st ANNUAL SESSION MICHIGAN STATE MEDICAL SOCIETY



E. F. Sladek, M.D.
Traverse City
Chairman, Council



R. S. Morrish, M.D.
Flint
President



P. L. Ledwidge, M.D.
Detroit
Speaker

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, on September 22, 23, 24, 25, 26 and 27, 1946. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

R. S. Morrish, M.D.
President

E. F. Sladek, M.D.
Council Chairman

P. L. Ledwidge, M.D.
Speaker

J. S. DeTar, M.D.
Vice Speaker

Attest:
L. Fernald Foster, M.D.
Secretary



L. Fernald Foster, M.D.
Bay City
Secretary



John S. DeTar, M.D.
Milan
Vice Speaker

Three-Day Session of House of Delegates

September 22-23-24, 1946

The 1946 House of Delegates of the Michigan State Medical Society will hold a three-day session beginning Sunday, September 22 at 8:00 p.m. The business of the House will be transacted in the English Room on Sunday and Monday; and on Tuesday in the Ballroom of the Book-Cadillac Hotel, Detroit.

The House also will meet Monday, September 23, at 10:00 a.m. and again on Tuesday, September 24 at 10:00 a.m. and 8:00 p.m. The intervals between meetings of the House of Delegates have been spaced to permit the reference committees ample time to transact all business referred to them. If the business warrants an additional meeting, it will be held Monday evening at 8:00 p.m.

Seating of Delegates

"Any Delegate-Elect not present to be seated at the hour of call of the First Session may be replaced by an accredited alternate next on the list as certified by the Secretary of the County Medical Society involved."

—MSMS By-Laws, Chapter 3, Section 3.

OUTLINE OF 1946 GENERAL ASSEMBLY SPEAKERS

80th Annual Session, Michigan State Medical Society

Detroit, September, 1946

	Wednesday September 25, 1946	Thursday September 26, 1946	Friday September 27, 1946
A.M. 9:00-9:25	Medicine EDGAR V. ALLEN, M.D. Rochester, Minnesota	Surgery R. B. CATTELL, M.D. Boston, Mass.	Gynecology EMIL NOVAK, M.D. Baltimore, Maryland
9:25-9:50	Surgery F. W. RANKIN, M.D. Lexington, Ky.	Medicine (Psychiatry) A. H. RUGGLES, M.D. Providence, R. I.	Medicine J. G. MILLER, M.D. Philadelphia, Pa.
9:50-10:35	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
10:35-11:00	Dermatology F. E. SENEAR, M.D. Chicago, Ill.	General Practice F. D. MURPHY, M.D. Milwaukee, Wisc.	Pediatrics H. E. ALEXANDER, M.D. New York, N. Y.
11:00-11.25	Obstetrics F. B. CARTER, M.D. Durham, N. C.	Pediatrics A. M. BUTLER, M.D. Boston, Mass.	Surgery R. R. GRAHAM, M.D. Toronto, Canada
11:25-12 M	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
P.M. 12:00-1:30	THREE SECTION MEETINGS Otolaryngology Dermatology Syphilology	FOUR SECTION MEETINGS Ophthalmology General Medicine Surgery Anesthesia	THREE SECTION MEETINGS Pediatrics Gynecology and Obstetrics Medicine
1:40-2:05	Medicine F. M. RACKEMANN, M.D. Boston, Mass,	Surgery GEORGE CRILE, JR., M.D. Cleveland, Ohio	Syphilology C. R. REIN, M.D. New York, N. Y.
2:05-2:30	Radiology ROSS GOLDEN, M.D. New York, N. Y.	Anesthesia R. T. KNIGHT, M.D. Minneapolis, Minn.	Pediatrics PHILIP LEVINE, M.D. Linden, N. J.
2:30-3:15	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	FINAL INTERMISSION TO VIEW EXHIBITS
3:15-3:40	Otolaryngology L. H. CLERF, M.D. Philadelphia, Pa.	Ophthalmology E. B. SPAETH, M.D. Philadelphia, Pa.	Medicine E. H. RYNEARSON, M.D. Rochester, Minnesota
3:40-4:05	General Practice S. A. WILKINSON, M.D. Boston, Mass.	Obstetrics N. J. EASTMAN, M.D. Baltimore, Maryland	Surgery C. W. MAYO, M.D. Rochester, Minn.
4:15-5:15	DISCUSSION CONFERENCES WITH GUEST ESSAYISTS	DISCUSSION CONFERENCES WITH GUEST ESSAYISTS	DISCUSSION CONFERENCES WITH GUEST ESSAYISTS
5:15-6:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	END OF CONVENTION
8:30-10:00	OFFICERS' NIGHT BIDDLE ORATION	STATE SOCIETY NIGHT	

House of Delegates --- 1946

English Room, Book-Cadillac Hotel, Detroit

ORDER OF BUSINESS*

SUNDAY, SEPTEMBER 22

8:00 p.m. E.S.T.—First Meeting

1. Call to order by Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Appointment of Reference Committees:
   - (a) On Officers' Reports
   - (b) On Reports of The Council
   - (c) On Reports of Standing Committees
   - (d) On Reports of Special Committees
   - (e) On Amendments to Constitution and By-Laws
   - (f) On Resolutions
5. Speakers' Address—P. L. Ledwidge, M.D., Detroit
6. President's Address—R. S. Morrish, M.D., Flint
7. Annual Report of The Council—E. F. Sladek, M.D., Traverse City, Chairman
8. Report of Delegates to American Medical Association—Henry A. Luce, M.D., Detroit, Chairman
9. Resolutions**
10. Reports of Standing Committees:
    - (a) Legislative Committee
    - (b) Committee on Distribution of Medical Care
    - (c) Representatives to Joint Committee on Health Education
    - (d) Medical-legal Committee
    - (e) Preventive Medicine Committee
      - Cancer
      - Maternal Health
      - Venereal Disease Control
      - Tuberculosis Control
      - Industrial Health
      - Mental Hygiene
      - Child Welfare
      - Iodized Salt
      - Heart and Degenerative Diseases
    - (f) Committee on Postgraduate Medical Education
    - (g) Committee on Public Relations
    - (h) Committee on Ethics
11. Reports of Special Committees:
    - (a) Committee on Nurses' Training Schools
    - (b) Conference Committee on Prelicensure Medical Education
    - (c) Radio Committee (scientific)
    - (d) Advisory Committee to Woman's Auxiliary
    - (e) Scientific Work Committee (in Council's Report)
    - (f) Professional Liaison Committee
    - (g) Beaumont Memorial Committee
    - (h) Committee on Procurement and Assignment of M.D.s
    - (i) Michigan Foundation Committee
    - (j) Joint Committee with State Bar of Michigan
    - (k) Medical Veterans' Readjustment Program (in Council's Report)
    - (l) Special Committee on Radio
    - (m) Postwar Education Committee
    - (n) Rheumatic Fever Control Committee
    - (o) Contact Committee with Association of Welfare Boards and Boards of Supervisors

MONDAY, SEPTEMBER 23

10:00 a.m. E.S.T.—Second Meeting

12. Supplementary Report of Committee on Credentials
13. Roll Call
14. Unfinished business
15. New Business†
16. Reports of Reference Committees:
    - (a) On Officers' Reports
    - (b) On Reports of The Council
    - (c) On Reports of Standing Committees
    - (d) On Reports of Special Committees
    - (e) On Amendments to Constitution and By-Laws
    - (f) On Resolutions

Recess

TUESDAY, SEPTEMBER 24

Ballroom, Book-Cadillac Hotel

10:00 a.m. E.S.T.—Third Meeting

17. Supplementary Report of Committee on Credentials
18. Roll Call
19. Unfinished Business
20. New Business
21. Supplementary Reports of Reference Committees:
    - (a) On Officers' Reports
    - (b) On Reports of The Council
    - (c) On Reports of Standing Committees
    - (d) On Reports of Special Committees
    - (e) On Amendments to Constitution and By-Laws
    - (f) On Resolutions

Recess

TUESDAY, SEPTEMBER 24

8:00 p.m. E.S.T.—Fourth Meeting

22. Supplementary Report of Committee on Credentials
23. Roll Call
24. Unfinished Business

*See the Constitution, Article IV, and the By-Laws, Chapter 3, on "House of Delegates."

**All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 3, Section 7-n).

†All Resolutions, special reports, and new business shall be presented in triplicate (By-Laws, Chapter 3, Section 7-n).

25. **Supplementary Report of The Council**
26. **Supplementary Report of Reference Committees**
27. **Elections**
    (a) Councilors
    1st District—C. E. Umphrey, M.D., Detroit —Incumbent
    4th District—R. J. Hubbell, M.D., Incumbent
    5th District—A. B. Smith, M.D., Grand Rapids—Incumbent
    6th District—R. C. Pochert, M.D., Owosso —Incumbent
    (b) Delegates to American Medical Association
    Henry A. Luce, M.D., Detroit—Incumbent
    T. K. Gruber, M.D., Eloise—Incumbent
    C. R. Keyport, M.D., Grayling—Incumbent
    (c) Alternate delegates to American Medical Association
    R. H. Denham, M.D., Grand Rapids—Incumbent
    W. B. Barrett, M.D., Detroit—Incumbent
    C. S. Gorsline, M.D., Battle Creek—Incumbent
    (d) President-Elect
    (e) Speaker of House of Delegates
    (f) Vice-Speaker of House of Delegates

Adjournment

DELEGATES TO MSMS HOUSE OF DELEGATES, 1946

Names of Alternates Appear in Italics

Officers
P. L. Ledwidge, M.D.
Detroit, Speaker
J. S. DeTar, M.D.
Milan, Vice Speaker
L. Fernald Foster, M.D.
Bay City, Secretary
A. S. Brunk, M.D.
Detroit, Immediate Past President

Allegan
E. B. Johnson, M.D., Allegan
H. J. Stuck, M.D., Allegan

Alpena-Alcona-Presque Isle
W. E. Nesbitt, M.D., Professional Bldg., Alpena
F. J. O'Donnell, M.D., State St., Alpena

Barry
C. A. E. Lund, M.D., Middleville
H. S. Wedel, M.D., Hastings

Bay-Arenac-Gladwin-Iosco
R. C. Perkins, M.D., Bay City
W. S. Stinson, M.D., Bay City
T. G. Wilson, M.D., Bay City
K. A. Alcorn, M.D., Bay City

Berrien
D. W. Thorup, M.D., Benton Harbor
D. M. Richmond, M.D., St. Joseph

Branch
R. L. Wade, M.D., Coldwater
H. J. Meier, M.D., Coldwater

Calhoun
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C. W. Brainard, M.D., Leila Post Montgomery Hospital, Battle Creek
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Michigan's Department of Health

WM. DE KLEINE, M.D., Commissioner, Lansing, Michigan

TEN LEADING CAUSES OF DEATH IN MICHIGAN BY AGE-GROUPS

Age-group	1945 Cause	Total	Male	Female	1935 Cause	Total	Male	Female
Under 1	All Causes	4,007	2,239	1,768	All Causes	4,170	2,424	1,746
	Premature birth	1,339	766	573	Premature birth	1,389	838	551
	Congenital malformations	743	397	346	Pneumonia	602	338	264
	Pneumonia	453	250	203	Congenital malformations	554	305	249
	Injury at birth	349	202	147	Injury at birth	292	173	119
	Other diseases peculiar to the first year of life	319	178	141	Other diseases peculiar to the first year of life	276	161	115
	Diarrhea, enteritis (under 2 years)	251	145	106	Diarrhea, enteritis (under 2 years)	184	96	88
	Accidents	97	49	48	Congenital debility	147	89	58
	Diseases of the thymus gland	77	40	37	Diseases of the thymus gland	105	67	38
	Congenital debility	52	30	22	Whooping cough	89	42	47
	Influenza	36	19	17	Influenza	73	47	26
1-4	All Causes	764	433	331	All Causes	1,060	587	473
	Accidents	209	128	81	Pneumonia	232	136	96
	Pneumonia	106	64	42	Accidents	161	88	73
	Congenital malformations	67	35	32	Measles	94	49	45
	Tuberculosis	46	19	27	Tuberculosis	68	37	31
	Influenza	29	17	12	Whooping cough	40	15	25
	Cancer	25	11	14	Influenza	37	17	20
	Leukemias and aleukemias	21	11	10	Scarlet fever	33	18	15
	Diphtheria	19	11	8	Diarrhea, enteritis (under 2 years)	32	19	13
	Other diseases of the nervous system	18	12	6	Congenital malformations	25	16	9
	Appendicitis	12	5	7	Diarrhea, enteritis (2 years and over)	22	13	9
	Diarrhea, enteritis (2 years and over)	12	5	7				
5-14	All Causes	688	428	260	All Causes	1,266	722	544
	Accidents	287	219	68	Accidents	302	224	78
	Pneumonia	34	17	17	Appendicitis	106	60	46
	Tuberculosis	31	7	24	Pneumonia	105	52	53
	Acute rheumatic diseases	28	15	13	Tuberculosis	79	34	45
	Appendicitis	27	15	12	Heart disease	60	28	32
	Cancer	25	17	8	Acute rheumatic fever	49	25	24
	Congenital malformations	21	13	8	Measles	47	25	22
	Disease of the buccal cavity, pharynx, tonsils and adnexa	18	6	12	Scarlet fever	37	27	10
	Heart Disease	18	6	12	Nephritis	34	14	20
					Disease of the mastoid process	30	16	14
15-24	All Causes	1,265	687	578	All Causes	2,071	1,113	958
	Accidents	359	274	85	Accidents	483	375	108
	Tuberculosis	250	87	163	Tuberculosis	352	137	215
	Heart disease	105	51	54	Pneumonia	159	102	57
	Cancer	58	36	22	Heart disease	149	67	82
	Maternal deaths	50	....	50	Maternal deaths	140	....	140
	Nephritis	47	26	21	Appendicitis	139	89	50
	Pneumonia	40	22	18	Suicide	62	41	21
	Homicide	29	19	10	Nephritis	39	16	23
	Suicide	27	20	7	Influenza	36	18	18
	Appendicitis	26	12	14	Epilepsy	32	20	12
25-44	All Causes	5,040	2,817	2,223	All Causes	7,022	4,039	2,983
	Heart disease	973	602	371	Heart disease	934	554	380
	Cancer	646	221	425	Accidents	876	733	143
	Tuberculosis	630	379	251	Tuberculosis	838	508	330
	Accidents	588	458	130	Pneumonia	822	581	241
	Nephritis	227	114	113	Cancer	523	190	333
	Pneumonia	188	117	71	Maternal deaths	293	....	293
	Suicide	175	129	46	Nephritis	293	142	151
	Apoplexy	168	74	94	Suicide	226	144	82
	Maternal deaths	115	....	115	Appendicitis	205	132	73
	Homicides	114	87	27	Apoplexy	172	81	91
45-64	All Causes	16,020	10,029	5,991	All Causes	13,926	8,344	5,582
	Heart disease	5,730	4,059	1,671	Heart disease	3,740	2,423	1,317
	Cancer	3,021	1,472	1,549	Cancer	2,144	934	1,210
	Apoplexy	1,405	676	729	Apoplexy	1,120	562	558
	Nephritis	767	462	305	Pneumonia	935	681	254
	Accidents	728	577	151	Accidents	896	702	194
	Tuberculosis	588	494	94	Nephritis	832	453	379
	Diabetes	559	184	375	Tuberculosis	532	393	139
	Pneumonia	421	307	114	Diabetes	492	183	309
	Syphilis	279	222	57	Suicide	280	232	48
	Cirrhosis of the liver	262	180	82	Syphilis	194	152	42
65 years and older	All Causes	25,827	13,752	12,075	All Causes	21,505	11,390	10,115
	Heart disease	10,575	5,726	4,849	Heart disease	7,560	4,025	3,535
	Apoplexy	3,533	1,720	1,813	Apoplexy	2,901	1,503	1,398
	Cancer	3,367	1,787	1,580	Cancer	2,459	1,261	1,198
	Nephritis	1,586	872	714	Nephritis	1,759	940	819
	Accidents	1,163	605	558	Accidents	974	486	488
	Arteriosclerosis	900	481	419	Pneumonia	943	521	422
	Diabetes	877	294	583	Arteriosclerosis	819	437	382
	Pneumonia	690	393	297	Diabetes	618	241	377
	Senility	375	174	201	Senility	471	219	252
	Diseases of the prostate	230	230	.....	Diseases of the prostate	309	309	.....

(Turn to Page 806)



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(Continued from Page 802)

DIPHTHERIA ON INCREASE

Diphtheria rose to eighth place among the leading causes of death for children between the ages of one and five in Michigan in 1945.

Between January 1 and May 1 a total of 187 diphtheria cases was reported to the Michigan Department of Health. This is more than twice the number of cases for the same period of 1942, the year when diphtheria began to rise.

County	Cases of Diphtheria	County	Cases of Diphtheria
Baraga	1	Kent	1
Bay	3	Lake	1
Berrien	3	Lapeer	1
Calhoun	23	Lenawee	3
Eaton	1	Mecosta	1
Genesee	7	Monroe	1
Gogebic	9	Oakland	9
Houghton	6	Ontonagon	2
Ingham	3	Saginaw	4
Ionia	1	Sanilac	1
Jackson	1	St. Clair	26
Kalamazoo	7	Schoolscraft	2
Kalkaska	1	Tuscola	1
		Wayne	68

INCIDENCE OF COMMUNICABLE DISEASE

Disease	April 1946	April 1945	7 Year Median
Diphtheria	27	34	22
Gonorrhea	1029	920	588
Lobar Pneumonia	67	77	309
Measles	9794	705	2488
Meningococcic Meningitis	23	26	11
Pertussis	435	307	736
Poliomyelitis	2	6	1
Scarlet Fever	782	1090	1227
Syphilis	1571	1422	1148
Tuberculosis	411	489	509
Typhoid fever	9	4	6
Undulant fever	18	24	15
Smallpox	1	2	3

LENAWEE VOTES FOR HEALTH DEPARTMENT

Lenawee will become the seventieth county in Michigan to have the services of a full-time health department. This was decided by a 26 to 3 vote by the board of supervisors on April 11, 1946. The supervisors hope that the new health department will be in operation by September 1, 1946.

DOCTOR SMITH RESIGNS

Lillian Smith, M.D., for several years director of the Bureau of Maternal and Child Health of the Michigan Department of Health, has announced her resignation, effective July 1, 1946.

Goldie Corneliuson, M.D., Associate Director of the Bureau for the past four years, has been appointed director to succeed Doctor Smith.

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What's What

W. W. Zuelzer, M.D., Detroit is the author of an original article "Folic Acid in Anemia" which appeared in JAMA of May 4, 1946.

* * *

The Saginaw County Medical Society and the Saginaw County Pharmaceutical Association held its annual "Druggists and Doctors Smoker" at Frankenmuth on April 11.

* * *

Bruce H. Douglas, M.D., Commissioner of Health, Detroit, recently was chosen a member of the Red Cross Advisory Board on Health Services. Congratulations, Doctor Douglas!

* * *

The University of Cincinnati has received a grant of $1,000 from Winthrop Chemical Company, Inc., to support investigations on nutrition carried out under the direction of Tom D. Spies, M.D., in 1946.

* * *

The two Michigan representatives to the U. S. Senate Committee on Education and Labor hearing on the Wagner-Murray-Dingell Bill in Washington, D. C., were R. L. Novy, M.D., and J. C. Ketchum, Detroit, who testified on May 23.

Procurement and Assignment Service for Michigan closed its office as of April 1; all future correspondence regarding procurement and assignment cases is to be forwarded to the P. and A. S. office in Washington, D. C.

* * *

The American Congress of Physical Medicine will hold its Twenty-fourth Annual Scientific and Clinical Session September 4-5-6-7 at Hotel Pennsylvania, New York. For information and program address the Congress at 30 North Michigan Ave., Chicago 2, Illinois.

* * *

A Comp for JMSMS.—"We consider your JOURNAL one of the best printed of all the State Medical Society magazines, and only ask you to please try to keep up the good work, both in make-ready and the matching of colors and in positioning."—F. Atwater, Advertising Manager, Wyeth, Inc., Philadelphia.

* * *

Extemporaneous Public Debate.—"It is the sense of the Executive Committee of The Council that it is not compatible with the best interests and good public relations of the medical profession for its members to engage in Extemporaneous Public Debate on medical socio-

(Continued on page 812)

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(Continued from Page 810)

economics. This does not refer to presentation of the views of the medical profession on socio-economic subjects in other than debate form."—November 28, 1945.

* * *

British Labor's Social Plans.—It has been calculated that with the new bill, and on the assumption that not more than 5 per cent of the employable population will be unemployed on the average, the British Government will be taking about 24 per cent of the gross income of individuals in compulsory contributions for social security and other forms of social services.—*Insurance Economics Surveys,* March, 1946.

* * *

W. B. Harm, M.D., Detroit, was installed as President of the Wayne County Medical Society at its Annual Meeting of May 6. The ceremonies were in charge of Stanley W. Insley, M.D., retiring President. Clarence L. Candler, M.D., was chosen as President-Elect.

A highlight of the WCMS meeting was the story of Robert K. Whitely, M.D., who related his experience as a Jap prisoner of war for 44 months.

* * *

John W. Towey, M.D., of Powers, Michigan, Medical Superintendent of the Pinecrest Sanitarium for the last twenty-five years, has been appointed as Chief of the Tuberculosis Division for the Columbus branch office of the Veterans Administration. Dr. Towey will be in charge of all technical and administrative aspects of the tuberculosis program in Veterans Administration hospitals of Ohio, Michigan and Kentucky. Congratulations and all success, Dr. Towey!

* * *

The "Army-Navy Number" of the Oakland County Medical Society Bulletin appeared as the May, 1946, issue. A special cover of imitation red leather with gold printing and special insignia of the military services graced this handsome number of 34 pages. A photograph and biographical sketch of the 61 Oakland County physicians who served in the armed forces during the last war covered 14 pages of the special Army-Navy Number.

* * *

George J. Curry, M.D., Flint, is the author of an original article "The Role of An Approved Affiliate Hospital under the Program of Graduate Training in Surgery" published in the American College of Surgeons Bulletin, February, 1946.

* * *

John H. Law, M.D., Detroit, was installed as President of the Michigan Hospital Association at ceremonies held at the Tri-State Hospital meeting in Chicago on May 3. Doctor Law is Superintendent of Detroit's Grace Hospital. Congratulations!

* * *

"There is, I believe, too much of a tendency in Washington to want to manage the lives and activites of everyone, whether or not they want or need such federal

(Continued on Page 814)



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(Continued from Page 812)

supervision. Continuation and expansion of such policies can do naught but pile the national debt higher and higher and push us further and further from a balanced budget."

—Mr. Fred Bailey, Legislative Counsel for the National Grange, before Senate Committee on Education and Labor, May 3, 1946.

* * *

The Ionia-Montcalm County Medical Society heard Major A. D. Alguire and Mr. Lyman Smith of the Office of Veterans Affairs, State of Michigan, at its meeting of May 21, in Portland.

The representative of the Office of Veterans Affairs reported on their arrangements for the medical care of veterans for non-service connected disabilites, and answered questions relative to the over-all coverage of veterans by the State Office of Veterans Affairs.

* * *

The Penal Law of the State of New York has been amended to authorize dissection of the dead body of a human being and "whenever and so far as the husband, wife or next of kin of the deceased, being charged by law with the duty of burial, (a) may authorize dissection for the sole purpose of ascertaining the cause of death, or (b) may authorize dissection for any other purpose by written instrument which shall specify the purpose and extent of the dissection so authorized."

This information has been forwarded by the Eye-Bank for Sight Restoration, Inc.

* * *

Louis J. Hirschman, M.D., former president of the Michigan State Medical Society, was a guest speaker at the South Carolina Medical Association meeting May 1, 1946. In their announcement of the meeting they paid tribute: "Our guest speaker is a pioneer of unusual ability and one upon whom many honors have been heaped. These have been well earned by a long life devoted to teaching and writing in a field of surgery which he helped to make respectable and worthy of a place as a true specialty in Medicine. . . . He has written several books on ano-rectal diseases, and has published innumerable articles. He has done us distinct honor to attend our meeting and to be so generous with his time and talents."

* * *

The eastern half of the Tenth Council District held a meeting, under the Chairmanship of Councilor Fred H. Drummond, M.D., Kawkawlin, on April 18. Approximately 40 members of the Alpena-Alcona-Presque Isle County Medical Society and of the Bay-Arenac-Iosco County Medical Society met at the Alpena Golf Club for a pre-prandial hour and dinner, followed by a program in which MSMS President R. S. Morrish, M.D., Flint, spoke on "Medical Economics and Courses in this Subject."

L. Fernald Foster, M.D., Bay City, Secretary of the State Society, outlined "Better Medical Public Relations."

Gordon Goodrich, Detroit, Assistant Director of Michi-

(Continued on Page 816)

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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

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(Continued from Page 814)

gan Medical Service, spoke on "Michigan's Plan for Home-Office Medical Care of Veterans."

A spirited general discussion followed, under the Chairmanship of J. A. Ramsey, M.D., President of the Alpena-Alcona-Presque Isle County Medical Society.

* * *

The Ghost Slayer.—Sen. Forrest C. Donnell last week revealed himself as an exorciser of ghost-writers, and Washington trembled at the threat to a comfortable tradition.

The Missourian opened his unorthodox attack as Secretary of Labor Lewis B. Schwellenbach concluded a twelve-page speech before the Senate Education and Labor Committee advocating passage of a health insurance bill. "Who wrote that speech?" Donnell asked. When the Secretary hedged, Donnell charged that Schwellenbach, relying solely on his "prestige as a member of the Cabinet," had made a speech on a subject "he knows nothing about." Despite Sen. Claude Pepper's protest that the Secretary was being questioned "like a criminal," the attack continued.

DONNELL: "Has the secretary read the testimony submitted by the Public Health Service to this Committee?"

SCHWELLENBACH: "No."

DONNELL (reading from Schwellenbach's speech): "I am sure you all must have been impressed, as I have been, with the testimony submitted by the Public Health Service to your committee."

SCHWELLENBACH (weakly): "Your criticism is absolutely right."

—*Newsweek,* May 13, 1946

* * *

Socialized Medicine in America.—To establish socialized medicine in America would be to place the health and welfare of the people in the hands of politicians. A co-operative health insurance program might be accepted by Congress but it is safe to say the majority of members do not want the CIO proposal. This is especially true following a showing by the Insurance Economics Society of America that 40,000,000 persons in America are already covered by voluntary health and accident policies—a five-fold increase since 1939—and at less cost than that which will be required if the Government takes over.

Congress was told this week that 400 companies now write health and accident insurance. Total premiums in 1944 were $525 million for this class of business, exclusive of hospital service policies. In addition more than 5,000,000 people carry prepaid medical care programs, covering hospital and surgical bills. Several million others are covered by employer-sponsored plans in industry. Seventeen million others participate in the so-called Blue Cross Hospital plans. Consolidating all of these voluntary protection measures, the report given Congress concludes that at least half of the population insures itself against medical costs; another 40 per cent

(Continued on Page 818)

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(Continued from Page 816)

handle these emergencies on a pay-as-you-go basis without hardship.

Those members of Congress who oppose the adoption of the socialistic schemes, such as proposed by the CIO, believe our system of free enterprise and constitutional government is the best in the world. Our Government may not be perfect but under its operation we have attained the highest standard of living and we are still a free people. Before the war the laboring men of Milwaukee owned and operated more automobiles than all Europe, including Russia, where they yet believe that only capitalists can have automobiles and bathtubs and such electric conveniences as refrigerators and ranges in their homes.

Is it not significant that it was necessary for capitalistic America to manufacture and supply the necessary military requirements for Communist Russia in the late war against Germany? That fact in itself should suggest something to those who now would abandon the American system and turn to one that has brought grief and disaster to every people who have tried it.—Congressman Paul Shafer of Michigan's 3rd District.

* * *

The Northern Michigan Medical Society held its June meeting at Indian River on June 13. Professor Paul D. Bagwell of East Lansing presented a fine talk entitled "Proposed National Health Legislation," to a professional audience numbering fifty-two. Among those present were doctors of medicine, dentists, pharmacists and legislators. Senator Otto Bishop and Representative Hugo Nelson were honored guests.

* * *

Henry R. Carstens, M.D., Detroit, past president of the Michigan State Medical Society, has assumed the position of Director of the Third Region of the Veterans Administration covering the states of Pennsylvania, New Jersey, and Delaware. Dr. Carstens took over his duties in Philadelphia on June 3. He has fifteen hospitals under his supervision. Colonel Carstens recently returned from Italy where he served as commanding officer of the 17th General Hospital, the Harper Hospital (Detroit) Unit. Dr. Carstens was Associate Professor for many years at Wayne University, as well as the Senior Attending Physician at Harper Hospital. The former Dean of Medical Service of Florence Crittenden Hospital, he was Michigan Governor of the American College of Physicians for a number of years. He has held the Presidency of the Detroit Academy of Medicine, Detroit Medical Club and the Wayne County Medical Society.

* * *

Associated Medical Care Plans, Inc., the new corporation formed by the Council on Medical Service and Public Relations of the American Medical Association, held its initial meeting in Chicago, April 27. Voluntary medical care plans representing nine states were admitted to membership: California, Iowa, Michigan, Ohio, Oregon, Pennsylvania, New Jersey, Nebraska and Surgical Care, Inc., of Kansas City, Missouri.

Purpose of the corporation is to intensify the growth and progress of the voluntary sickness insurance plans

(Continued on Page 820)



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(Continued from Page 818)

in the United States. A second meeting will be held in San Francisco at the time of the American Medical Association meeting.

The Council on Medical Service and Public Relations has established standards which cover the costs of such service and the quality of medical care that is given under the insurance policy. The nine plans already admitted meet the standards of this Council. They will be given a seal indicating that they do meet the standards and are approved. Eventually, the purchaser of a policy covering medical care will know that those bearing the seal of acceptance of the Council assure him a high quality of medical care at the lowest possible insurance cost.

* * *

Department of Psychiatry at Wayne.—Appointment of Dr. John M. Dorsey as special professor and chairman of the department of psychiatry at the Wayne University College of Medicine, coupled with an anonymous grant of $90,000, marks the University's expansion of its program in psychiatry. Dr. Dorsey, director of the Child Guidance Division of the Children's Fund of Michigan, will begin his new duties July 1.

"In securing Dr. Dorsey to fill this position," said College of Medicine Dean Hardy A. Kemp, "we have a man ably equipped to carry forward the work in psychiatry. The fact that he will devote full time to the position means that the program can now be enlarged to take its place as one of the major departments in medical education."

The $90,000 gift is to underwrite the expansion for a period of five years. The donor indicated that prior to the end of the period the program will be reviewed to determine whether or not the grant should be continued. The funds will be administered through the Wayne University Foundation, a non-profit corporation founded to act as trustee for the receipt, management, and disbursement of grants and gifts to Wayne University.

Dean Kemp speaks of the grant as a means of "preserving balance" in the training of doctors. Professional training in medicine, he indicated, could easily become overly mechanized in modern scientific society. "There is as much need today as there ever was for the physician, equipped though he be with every modern facility, to be sensitive to the mental states of his patients and appreciate their relationship to all-round health," Dean Kemp said. "The present donation will allow psychiatry to take its rightful place among the major departments of our curriculum." Beyond this, the Dean declared, the expansion of the program will enable the University to broaden its services to the entire community.

In addition to his association with the Children's Fund, Dr. Dorsey is a physician in the Harper Hospital staff and holds the position of lecturer in the post-graduate School of Medicine at the University of Michigan and of psychiatrist with the School Survey Committee of Purdue University. He is listed both in "American Men of Science" and in "Who's Who in America."

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FLUORINE IN UNITED STATES WATER SUPPLIES. By Anastasia Van Burkalow. A pamphlet reprinted from the Geographical Review. The American Geographical Society.

THE PROGRESS OF MEDICAL GEOGRAPHY, Richard Upjohn Light. Also, A Proposed Atlas of Disease with a note on terminology of certain map symbols. By J. K. Wright. Reprinted from The Geographical Review, The American Geographical Society.

ORAL MEDICINE, DIAGNOSIS AND TREATMENT, By Lester W. Burket, D.D.S., M.D., Professor of Oral Medicine, The Thomas W. Evans Museum and Dental Institute School of Dentistry, University of Pennsylvania. With a Section on Oral Aspects of Aviation Medicine By Major Alvin Goldhush, D.D.S., M.S., D.C., A.U.S. 350 Illustrations, 60 in colors and 10 plates. Philadelphia: J. B. Lippincott Company, 1946. Price $12.00.

This is a complete textbook of the relations of disease to mouth manifestations. The importance of history is stressed, and many laboratory tests described. The first chapter is on fusospirochetal disease (Vincent's infection). Minerals and allergies receive a chapter each. The tongue, the dermatoses, gingivitis and respiratory diseases are all included. Each is well illustrated, the description is clear, giving forms, bacteriology and treatment. Then endocrines, cardiovascular diseases all have their special manifestations in the mouth, as have the blood dyscrasias, syphilis, nutritional diseases, vitamins, tuberculosis, focal infections. This adds up to an imposing book, and one that no doctor of medicine, not to mention the dentists, can afford to be without. Here he will find answers to questions arising every day.

DISEASES OF THE ADRENALS. By Louis J. Soffer, M.D., Adjunct Attending Physician the Mount Sinai Hospital, New York City. Illustrated with 42 Engravings and 2 colored plates. Philadelphia: Lea & Febiger, 1946. Price $5.50.

The knowledge of the adrenaks has greatly increased in the past few years, and this book brings the student and practitioner up to date. Anatomy and morphological structure are mentioned, then a chapter on the mechanical and chemical methods used in the study and diagnosis of adrenal disease. Physiology occupies two chapters, then Addison's disease. This is a complete exposition of the disease with all its manifestations and treatment. Other diseases referrable to the adrenal occupy two thirds of the book. It is very instructive and valuable to the internist.

A MALARIOLOGIST IN MANY LANDS. By Marshall A. Barber, M.D., Chief of the Division of Parasitology, U. S. Army. With a foreword by Paul F. Russell. Lawrence, Kansas: The University of Kansas, 1946. Price $2.50.

Dr. Barber in his work has visited every part of the world where malaria prevails, and here he has given us a report. It is not technical, but is accurate. The story is informal. He shows the relation of malaria to floods, famine, animals, et cetera. The book is entertaining to both the doctor and the layman.

(Continued on Page 824)

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OBSTETRICS—Two-week Intensive Course, starting October 7.

MEDICINE—Two-week Intensive Course, starting June 17 and September 23.

ELECTROCARDIOGRAPHY AND HEART DISEASE—Two-week Intensive Course, starting August 5.

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(Continued from Page 822)

SUGGESTION AND HYPNOSIS MADE PRACTICAL. How to Get What you Want. By Samuel Kahn, M.D., Ph.D., Author of Psychological and Neurological Definitions, et cetera. Formerly Clinical Professor of Neurology and Psychiatry at Georgetown and George Washington Universities, et cetera. Boston: Meador Publishing Company, 1946. Price $3.00.

This book seems to be written partly for the use of the "intelligent people" who want to handle their relatives and friends efficiently. There is a chapter on suggestion in medicine, and one on suggestion in business also one on rumor and propaganda. It is an interesting book, easily read and contains valuable suggestions.

COSMETICS AND DERMATITIS. By Louis Schwartz, M.D., Medical Director United States Public Health Service, Adjunct Professor in Dermatology, Georgetown University School of Medicine, et cetera, and Samuel M. Peck, M.D., Medical Director (R) of the United States Public Health Service, Associate Attending Dermatologist, Mt. Sinai Hospital, New York City, et cetera. New York: Paul B. Hoeber, Inc., 1946. Price $4.00.

The available literature on cosmetic dermatitis is studied and the results are made available here. It is only in the last ten years that cosmetic dermatitis has received the attention it deserved from the physician. Formulas of most cosmetics are given, the diagnosis and patch tests, and treatment. A valuable book for all physicians dealing with the effects of cosmetics, and the care of these lesions.

RORSCHACH'S TEST. II. A variety of Personality Pictures by Samuel J. Beck, Ph.D., Head of Psychology Laboratory, Department of Neuropsychiatry, Michael Reese Hospital, Chicago; Associate Professor of Psychology, Northwestern University. Foreword by Roy R. Grinker, Lt. Col., MC. New York: Grune & Stratton, 1945. Price, $5.00.

The Rorschach method of dynamic personality evaluation is by no means new: it is a quarter century now since the publication of Dr. Rorschach's *Psycho-diagnostik*. The fact that the test now has a widespread acceptance in psychiatry, psychology, and social work is a tribute to the efforts and earnest belief of the pioneers in the fineness of their psychological instrument. Dr. Beck is to be counted among the pioneers.

This volume is the companion work of his publication of two years ago, wherein he elaborated the basic processes implicit in the objective application of Rorschach symbolism and statistics. At present his focus of attention is almost wholly on test interpretations. Under the subtitle of "A Variety of Personality Pictures," this collection of Rorschach records represents in essence a summation of his total clinical experience with the test. As he states in his preface, "It embodies progress in interpretation since the publication of my *Introduction to the Rorschach Method* in 1937, assimilating both the advances reported by others, and my own enlargement of experience growing out of my work at Michael Reese Hospital."

The interpretation of a Rorschach record, as sampled here, approaches the status of a fine art. It involves an appraisal of each response as it is offered, an analysis of the subject's total and specific behavior during the examination, and a quantitative and qualitative study of the scores. The process further presumes an evaluation of the results in terms of recognized norms, in the light of their unique inter-relationships, and against the background of the individual's case history. Dr. Beck demonstrates a remarkable facility in the balancing of all these factors and in producing therefrom a functional picture of the personality as a unit organism that is constantly adjusting under the impact of diverse forces.

Say you saw it in the Journal of the Michigan State Medical Society

DISCHARGED OFFICERS

(Continued from Page 746)

dental, medical administrative, veterinary and sanitary corps and Medical Department dietitians.

Officers who return to duty under the plan would hold the same grade they held while on active duty prior to separation. Plans are under consideration at present to provide a permanent place in tables of organization for dietitians. Advisability of incorporating dietitians in the Army was demonstrated by their exceptional wartime accomplishments.

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Outstanding success of the system of appointing professional consultants in medical and allied specialities born during the war will be continued and extended, Major General Norman T. Kirk, The Surgeon General of the Army, recently announced.

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"By continuing the system of employing consultants we will insure maintenance of the Army's high medical standards," General Kirk stated. "Consultants, acting as representatives of my office, will evaluate, promote and improve the quality of medical care and sanitation."



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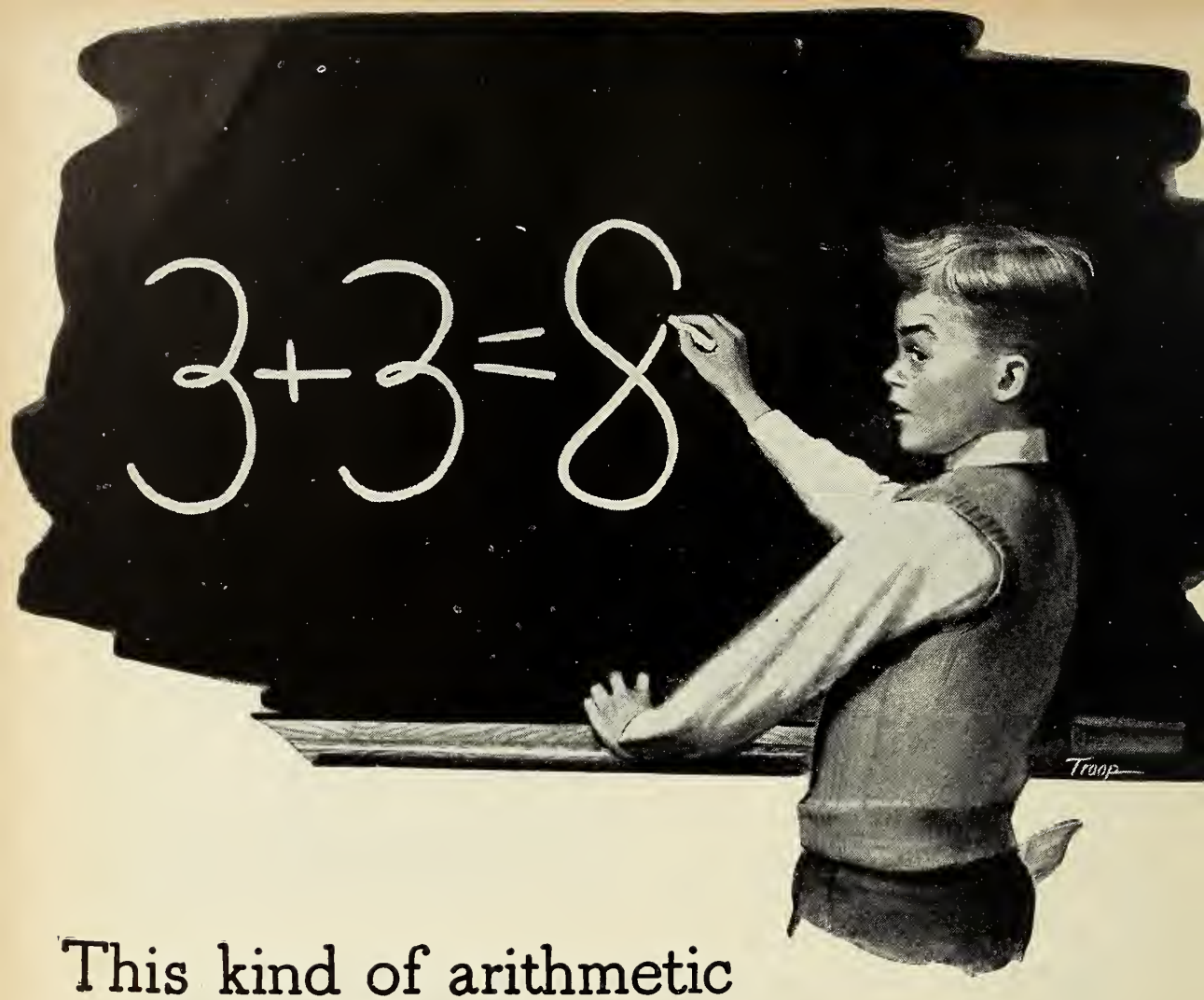
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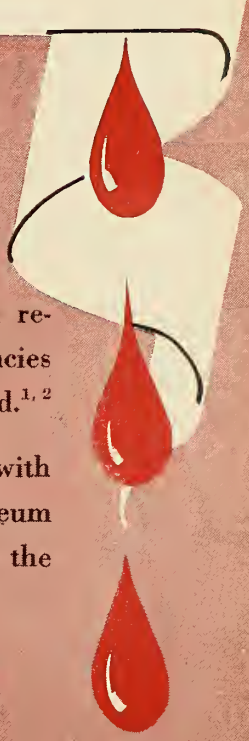
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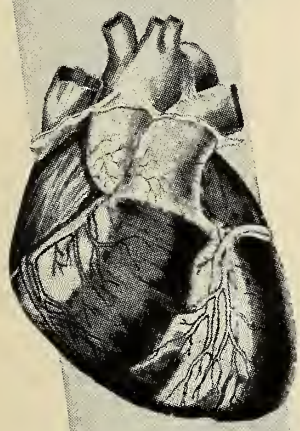
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In Daily Maintenance, too...

ALL THESE ADVANTAGES



MAINTENANCE of sustained, unvarying, digitalization of the failing myocardium can be accomplished only through the use of cardiotonic drugs of uniform potency and dependable therapeutic action. Differences in potency make for varying clinical results which, in the case of cardiac disease, may prove extremely distressing to both patient and physician.

With Digitaline Nativelle—pure crystalline digitoxin—such uncertainty is circumvented. Representing the chief cardiotonic glycoside of Digitalis purpurea, Digitaline Nativelle is so constant in potency and pharmacologic action that dosage can be and is measured by weight. One tablet of 0.1 mg. represents the therapeutic equivalent of 1.5 gr. of standardized whole digitalis leaf, a ratio which reflects its high state of purity.[1]

Dependable maintenance digitalization is effected by 0.1 mg. daily; only rarely must this quantity be raised to 0.2 mg. daily. Thus no different instructions need be given the patient. Because it is absorbed in toto, probably from the stomach, Digitaline Nativelle virtually never produces nausea or vomiting from local irritation.[2]

If desired, rapid, *complete*, digitalization may be produced in 6 to 10 hours by the *oral* administration of 1.2 mg. of Digitaline Nativelle,[3] given either at one time or in 2 doses of 0.6 mg. each at a 3- to 6-hour interval.

WHEN THE INTRAVENOUS ROUTE IS DESIRED

Digitaline Nativelle is available in ampuls of 0.2 mg. (1 cc.) and 0.4 mg. (2 cc.), in packages of 6 ampuls. Intravenous dosage identical with oral dosage for initial digitalization.



1 Gold, H.; Cattell, M.; Modell, W.; Kwit, N. T.; Kramer, M. L., and Zahm, W.: J. Pharmacol. & Exper. Therap. *82*:187 (Oct.) 1944.
2 Gold, H.: Connecticut M. J. 9:193 (Mar.) 1945.
3 Levine, S. A.: Clinical Heart Disease, ed. 3, Philadelphia, Pa., W. B. Saunders Company, 1945, p. 273.

Physicians are invited to send for samples, literature, and bibliography.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

COUNCIL ACCEPTED

VARICK PHARMACAL COMPANY, INC.
A Division of E. Fougera & Co., Inc.
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Digitaline Nativelle

REG. U. S. PAT. OFF

THE ORIGINAL DIGITOXIN IN PURE, CRYSTALLINE FORM

MSMS COMMITTEE PERSONNEL

(Continued from Page 836)

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L. W. Shaffer, M.D., Grosse Pte. Pk.

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Stuart J. Rackham Company

Stuart J. Rackham, President — CORRECT SHOES FOR MEN AND WOMEN — Clyde K. Taylor, Manager

2040 Park Ave.—Opposite Women's City Club Detroit 26, Michigan

YOU WRITE THE *Prescription* WE FILL IT . . .

Whenever Dairy Products are indicated in the diet—remember Borden's—Distributors of Fluid Milk, Cream and other Dairy Products.

—if it's Borden's, it's got to be good!

BORDEN'S FARM PRODUCTS CO. OF MICHIGAN

3600 E. FOREST IN GREATER DETROIT—PLAZA 9000



At first the infant,
Mewling and puking in the nurse's arms*

ZYMENOL has long been recognized by obstetricians and pediatricians as an ideal bowel management therapy.

ZymenoL, a brewers' yeast emulsion,** aids restoration of physiological bowel content through zymolysis and helps to normalize intestinal motility with its complete, natural vitamin B complex content.

Soft, comfortable, regular evacuation is assured without catharsis or colloidal bulkage. Because ZymenoL is agreeably palatable, sugar free, and the only emulsion effective in *teaspoon* doses, patient-control is seldom a problem.

For patient-acceptable bowel management in *any* age group—specify ZymenoL.

OTIS E. GLIDDEN & CO., Inc., Evanston, Ill.

***Glidden processed brewers' yeast assures zymolytic factors and natural vitamin B complex without live yeast cells.*



ZymenoL
Brewers' Yeast Emulsion

Effective in

CONSTIPATION | COLITIS | DIARRHEA

**First of a series depicting the Seven Ages of Man. From Shakespeare's "As You Like It."*

You and Your Business

MSMS 81st ANNUAL SESSION, SEPTEMBER 25-26-27, DETROIT

The 1946 Annual Session of the Michigan State Medical Society will be held at the Book-Cadillac Hotel, Detroit, September 22 to 27. Briefly, the daily schedule is as follows:

Sunday, September 22, 8:00 p.m.—House of Delegates.

Monday, September 23, 10:00 a.m. and 8:00 p.m.—House of Delegates.

Tuesday, September 24, 10:00 a.m. and 8:00 p.m.—House of Delegates.

Wednesday, September 25, Scientific Session—General Assemblies and meetings of the Otolaryngology, Dermatology and Syphilology, and Radiology Sections.

Thursday, September 26, Scientific Session—General Assemblies and meetings of the Ophthalmology, General Medicine, Surgery, and Anesthesia Sections.

Friday, September 27, Scientific Session—General Assemblies and meetings of the Pediatrics, Gynecology and Obstetrics, and Medicine Sections.

Officers' Night (a public meeting) will be held Wednesday, September 25, 8:30 p.m. State Society Night will be a social event of Thursday, September 26, with dancing for MSMS members and their ladies in the Grand Ballroom, Book-Cadillac Hotel, 10:00 p.m. to 1:00 a.m.

Members are urged to obtain their hotel reservations early—well in advance of September.

V. A. HOME-TOWN MEDICAL CARE A SUCCESS IN MICHIGAN

Over 500 cases per day are being processed by the Michigan Medical Service. Michigan's veterans are receiving excellent medical care from their home-town doctors—their family physicians, physicians of their own unlimited choice.

The medical director of the veterans facility at Dearborn, in his talk to the Wayne County Medical Society on May 6, urged the following simple rules:

1. Do not perform any services without authorization indicated on reporting form issued by Michigan Medical Service.

2. Do not charge veterans for unauthorized examination or treatment of a service-connected disability. (Space is provided on the reporting form for physicians to indicate additional services required.)

3. Process and return forms promptly. (Payment of pensions to veterans is withheld until all forms are completed.)

4. Whenever in doubt as to procedure or extent of treatment, call the Outpatient Department of the Veterans Administration, Buhl Building, Detroit, CHerry 4905.

5. The authorization blank includes and indicates a code number which agrees with a particular service listed in the Uniform Fee Schedule for Governmental Agencies; the physician is authorized to give this service as indicated by the code number, and no other service.

6. Send your bill to the Veterans Administration, Buhl Building, Detroit (not to Washington).

It is to be noted that authorization for service —in males—is given for only service-connected disabilities.

However, both service and non-service connected disabilities are eligible for medical treatment so far as *women veterans* are concerned.

For additional copies of the Uniform Fee Schedule for Governmental Agencies, contact Michigan Medical Service, 234 State St., Detroit 26, Michigan.

MSMS NEWSPAPER ADVERTISING CAMPAIGN PRESENTS FACTS

The MSMS newspaper advertising campaign, an experiment of 1946 and "Another First for Michigan," has been highly successful.

The Michigan State Medical Society placed, through the county and district medical societies, one advertisement, 8 by 10 inches in size, and defrayed the expenses of this advertisement. The advertisement was placed in as many papers in each county as the county medical society felt necessary for adequate coverage.

A series of eleven additional advertisements of the same size were prepared and proof sheets sent to county societies. Free mats of these advertisements were available from the Michigan State

(Continued on Page 842)

The Cosmetic Effect OF OPTICAL DESIGN



When eyes need help, today's high school boy no longer considers it a handicap to wear glasses. The application of modern optical design has banished forever the stigma of "sissy" and "four-eyes" . . . made youngsters look upon glasses as another article of wear. Uhlemann, as pioneers, have helped create this impression by styling lens shapes and frames that are sturdy, yet unobtrusive . . . that blend in with the face. Our complete resources make us especially well qualified to work with you in fitting teen-age patients to their complete satisfaction, and yours.

UHLEMANN OPTICAL COMPANY

ESTABLISHED 1907

Exclusive Opticians for Eye Physicians

Stroh Building • 32 West Adams Avenue • Detroit
1118 Maccabees Bldg., Detroit • 666 Fisher Bldg., Detroit

CHICAGO • OAK PARK • EVANSTON • ROCKFORD • ELGIN
TOLEDO • SPRINGFIELD • APPLETON • DAYTON • DETROIT

MSMS NEWSPAPER ADVERTISING CAMPAIGN PRESENTS FACTS

(Continued from Page 840)

Medical Society upon request of the publisher, with the approval of the county medical society. County societies were urged to place these eleven advertisements, or any individual ones it chose, in the newspapers of its selection. The expense of these was the responsibility of the county society, either directly or through local sources (such as pharmacists, chemists, individuals).

A total of eighty-seven newspapers is being utilized by the state and county medical societies in its 1946 newspaper advertising campaign of information and facts on the advantages to the people of the voluntary private practice of medicine.

BARUCH COMMITTEE ON PHYSICAL MEDICINE

The need for additional rehabilitation services and centers where the disabled and handicapped can receive post-hospital physical rehabilitation, psychosocial adjustment and vocational guidance and retraining is stressed in the final report of the subcommittee on civilian rehabilition centers issued recently by the Baruch Committee on Physical Medicine.

The report blueprints the organization and operation of model community rehabilitation centers. Emphasizing that such centers should integrate rather than duplicate the work of existing agencies, it outlines the organization and operation of proposed centers which would offer physical medicine (physical therapy, occupational therapy, physical rehabilitation), psychosocial adjustment, vocational guidance, social service, vocational education, special education for the handicapped, a sheltered workshop, brace and limb shop, research in rehabilitation, and an industrial program for the homebound.

The centers would not provide definitive medical treatment, but would bridge the gap between the bed and the job by following preventive and curative medicine and surgery with what the committee terms "the third phase of medical care."

The report suggests that the envisioned centers might be established by communities as "living war memorials" by the action of local governments, civic groups, social agencies, or medical schools and hospitals. They point out that both the construction and operating costs of such centers would be considerably less than for hospitals and would release needed hospital beds for sick patients.

Copies of the complete report are available from the Baruch Committee on Physical Medicine, Room 3500, 597 Madison Avenue, New York 22, New York.

U. S. PUBLIC HEALTH SERVICE

Announcement is made by Surgeon General Thomas Parran of the U. S. Public Health Service that a grant for the establishment of 125 fellowships to train physicians and sanitary engineers in public health has just been approved by the National Foundation for Infantile Paralysis.

Each fellowship provides a year's graduate training in a school of public health or a school of sanitary engineering. The fellowships will be administered by the Committee on Training of Public Health Personnel, which consists of representatives of schools of public health, the State and Territorial Health Officers, the American Public Health Association and the U. S. Public Health Service.

The fellowships are available either during the academic year beginning in the fall of 1946 or the fall of 1947, and are open to men and women, citizens of the United States under 45 years of age.

The purpose of the fellowships is to aid in the recruitment of trained health officers, directors of special medical services, and public health engineers to help fill some of the 900 vacancies in public health medical positions and 300 vacancies for public health engineers, existing in state and local health departments over the country. The fellowships are reserved for newcomers to the public health field, and are not open to employes in state and local health departments, for whom federal grants-in-aid are already available to the states.

Applicants for fellowships may secure further details by writing to the Surgeon General, U. S. Public Health Service, Attention: Public Health Training, 19th and Constitution Avenue N.W., Washington 25, D. C. Owing to the anticipated heavy enrollment in graduate schools, completed applications for training in the fall term of 1946 should be filed promptly. The awards committee will act on applications on the following dates: June 15, July 1, July 15 and August 1.

Is government providing more recruits to take over when medicine has become regimented?

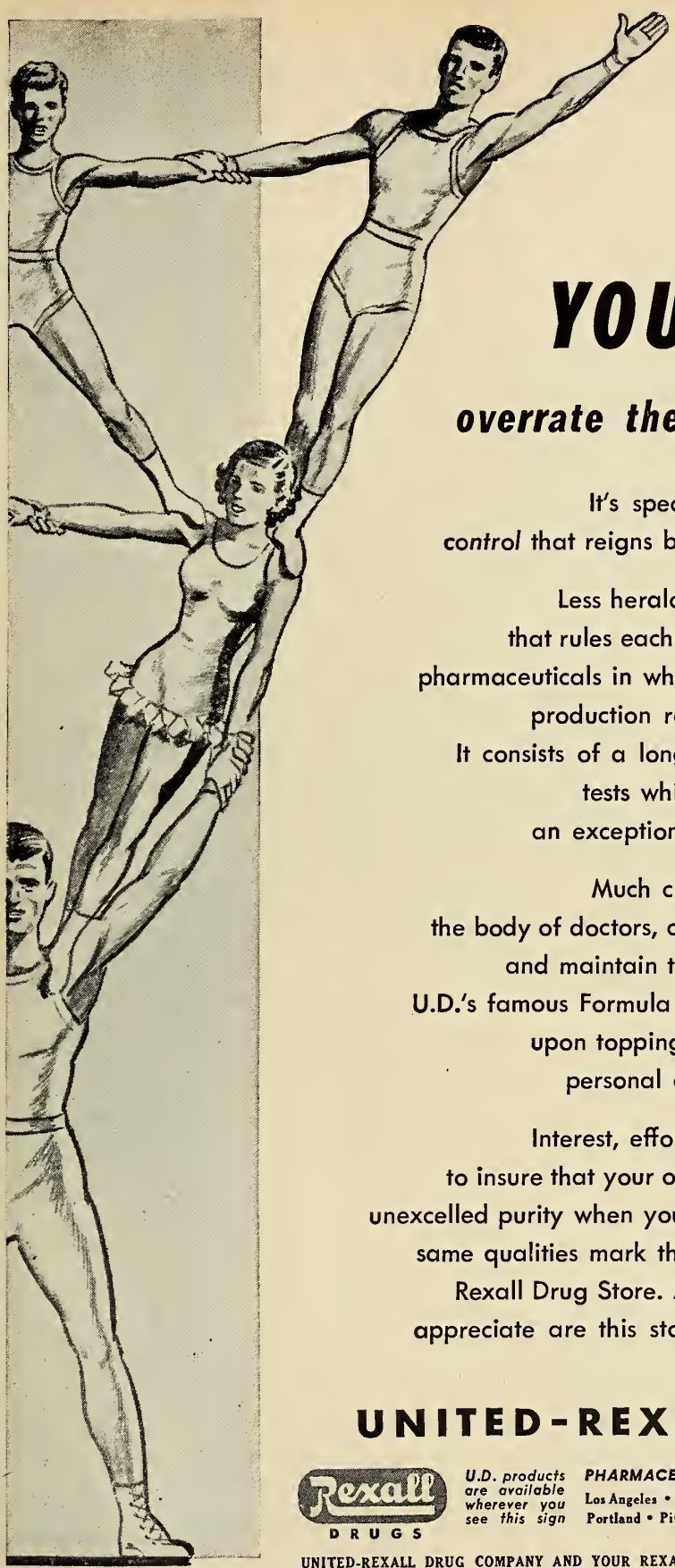
$90,000 DONATION TO UNDERWRITE EXPANSION OF PSYCHIATRY PROGRAM

A grant of $90,000 to underwrite the expansion of the program in psychiatry in the Wayne University College of Medicine during a five-year period has been announced by University President David D. Henry.

The gift, which is to be available on July 1 with the opening of the new academic year in the college, has been made "by an interested but anonymous donor" who has indicated that, prior to the end of the five years, the program will be reviewed to determine whether or not the grant should be continued. "This grant is a splendid example," said Dr. Henry in announcing the gift, "of private philanthropy making it possible for the university to develop its program in most desirable directions that would be impossible under the restricted resources of the university's budget."

College of Medicine Dean Hardy A. Kemp hailed the subvention as a means to "preserving balance" in the training of doctors. Professional training in medicine, he indicated, could easily become overly mechanized in modern scientific society. "There is as much need today

(Continued on Page 844)



YOU CAN'T

overrate the value of CONTROL

It's spectacular, but brief—the kind of *control* that reigns beneath the big top each Spring.

Less heralded is the day-in day-out control that rules each operation in the manufacture of pharmaceuticals in white-walled U.D. laboratories and production rooms. For this is *quality control.* It consists of a long-established, efficient system of tests which have won for these products an exceptional record for consistent quality.

Much credit for these fine results is due the body of doctors, chemists and pharmacists who set and maintain the high standards. This group is U.D.'s famous Formula Control Committee which insists upon topping all previous precautions with a personal check of every finished formula.

Interest, effort, care and experience combine to insure that your orders are filled with materials of unexcelled purity when you specify U.D. preparations. The same qualities mark the service of your neighborhood Rexall Drug Store. Additional features that patients appreciate are this store's convenience and economy.

UNITED-REXALL DRUG CO.

Rexall DRUGS

U.D. products are available wherever you see this sign

PHARMACEUTICAL CHEMISTS FOR MORE THAN 43 YEARS

Los Angeles • Boston • St. Louis • Chicago • Atlanta • San Francisco
Portland • Pittsburgh • Ft. Worth • Nottingham • Toronto • So. Africa

UNITED-REXALL DRUG COMPANY AND YOUR REXALL DRUGGIST • *Your Partners in Health Service*

$90,000 DONATION TO UNDERWRITE EXPANSION OF PSYCHIATRY PROGRAM

(Continued from Page 842)

as there ever was for the physician, equipped though he be with every modern facility, to be sensitive to the mental states of his patients and appreciate their relationship to all-round health," Dean Kemp said. "The present, most welcome donation will allow psychiatry to take its rightful place among the major departments of our curriculum." Beyond this, the Dean declared, the expansion of the program will enable the University to broaden its services to the entire community.

The funds, which are to be provided annually under the grant, are to be administered through the Wayne University Foundation, non-profit corporation founded eight years ago to act as trustee for the receipt, management, and disbursement of grants and gifts to Wayne University. The money will be used to establish a full-time professorship in the Department of Psychiatry.

Dr. A. William Lescohier, president of Parke, Davis and Company and chairman of the Wayne University Foundation, acknowledged the Foundation's acceptance of the grant and said, "There is no field in medicine in which a substantial grant such as this could be made to greater advantage. The need for trained psychiatrists has been intensified by the stresses and strains experienced during the war. The quality of psychiatric service which is available now is high, but the number of psychiatrists is insufficient. The donor of this fund is to be congratulated on a highly significant contribution."

NEW MALARIA CURE

Discovery of new compounds in the field of chemotherapy that promise to prove beneficial in the prevention and cure of malaria was announced in a paper by Dr. Louis F. Fieser, Harvard University, read at ceremonies formally dedicating to scientists the Kresge-Hooker Scientific Library at Wayne University (Detroit) Saturday, May 11.

Based upon Dr. Samuel Cox Hooker's researches in "lapachol" a new organic chemical, Fieser's recent experiments have revealed that "hydrolapachol" possesses the power to destroy malaria parasites in the blood stream. Dr. Fieser stated that this is a new departure in the field of chemotherapy, for hydrolapachol belongs to a chemical type different from, and simpler than, all previously known chemotherapeutic agents. These known agents—quinine, atabrine, plasmoquin, the sulfa drugs, araphenamine, and even penicillin and streptomycin—all contain the element nitrogen and most of them are of complex molecular structure. Hydrolapachol is a simple, nitrogen-free substance, says Dr. Fieser, derived from certain woods. Drugs of the quinine-atabrine type effectively clear the blood of the malaria parasites that invade red blood cells and give rise to the characteristic symptoms of chills and fevers, but do not destroy "hidden" or "tissue" forms of parasites postulated as being responsible for recurrent relapses following periods of apparent freedom from the disease. Thus a prime objective of the extensive researches undertaken during the war was the discovery of compounds endowed with a curative action. What seemed to be needed, according to Dr. Fieser, was a chemotherapeutic agent of a type entirely different from the *vivax*-suppressive drugs, quinine and atabrine.

MISSISSIPPI VALLEY MEDICAL SOCIETY

The 11th annual meeting, Mississippi Valley Medical Society, will be held at the Hotel Jefferson, St. Louis, September 25-26-27. More than thirty clinical teachers from the leading medical schools will conduct this great postgraduate assembly whose entire program is planned to appeal to general practitioners. There will be more than sixty technical and scientific exhibits, noon-day round-table luncheons, and a big banquet, preceded by a social hour. Dr. Arthur H. Compton, Nobel Prize Laureate and Chancellor of Washington University, will be the principal banquet speaker, together with the presidents of the Illinois, Iowa and Missouri State Medical Societies. All ethical physicians are cordially invited to attend. A detailed program may be obtained from the Secretary, Harold Swanberg, M.D., 209-224 W.C.U. Bldg., Quincy, Ill.

NATIONAL HEALTH AGENCY BILL, H. S-2143

Senator Robert A. Taft, speaking for himself, and Republican Senators Joseph H. Ball and H. Alexander Smith, on May 3, introduced in the Senate a national health bill, based on new principles, to assure the extension of hospital and medical service throughout the United States.

The new bill proposes that all of the scattered health activities of the Federal Government be put together in a new independent National Health Agency to be headed by an outstanding physician. It is based on the extension of Federal aid to the States to enable them to give comprehensive hospital and medical service to every American unable to pay the full cost of such service.

Federal aid amounting to $200,000,000 a year for general medical and surgical service, and $20,000,000 a year for dental service is authorized by the bill, but with complete control of administration under State and local governments.

The new measure encourages the formation of voluntary health insurance funds, and also provides money for research, and grants-in-aid for research. The authors said that their bill is intended entirely to replace the Federal compulsory sickness insurance program proposed by Senators James E. Murray and Robert F. Wagner and Representative John D. Dingell.

The authors pointed out that, if possible, they would prefer to see the Health Agency a department of the government with a representative in the Cabinet, but that they felt this might create opposition to the vitally important job of consolidating health activities under an independent agency.

The bill proposes that as a condition of obtaining Federal aid, each State shall make a comprehensive survey of the health activities throughout the State, both public and private, urban and rural, with special reference to the medical care provided for the lower in-

(Continued on Page 846)

How to shift to 'WELLCOME' GLOBIN INSULIN from 3 injections to 1 a day...



A relatively simple procedure can make the unique advantages of intermediate-acting 'Wellcome' Globin Insulin with Zinc available to patients on regular insulin (crystalline or amorphous). Three steps can change the patient from two or more injections daily to one injection a day.

STEP 1 The initial daily dose of 'Wellcome' Globin Insulin with Zinc should be approximately 2/3 the total number of units of regular insulin previously given daily.

STEP 2 Adjust the carbohydrate distribution of the diet as required for the individual patient. This adjustment will be based on fractional urinalyses and blood sugar determination, if the latter are available.

STEP 3 Increase or otherwise adjust the daily dose of Globin Insulin as required. This adjustment is made in conjunction with step 2. Frequently, the final dosage of Globin Insulin will be not more than 4/5 the total units of regular insulin previously required daily.

Available in 40 and 80 units to the cc., vials of 10 cc. *'Wellcome' Trademark Registered.*

'WELLCOME' Globin Insulin WITH ZINC

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST STREET, NEW YORK 17, N.Y.

Say you saw it in the Journal of the Michigan State Medical Society

NATIONAL HEALTH AGENCY B.H. S-2143

(Continued from Page 844)

come groups. Based on this survey, the State must propose a plan by which hospital service and medical service in hospitals and clinics are made available to all families and individuals unable to pay for such services. In short, the plan must fill up the gaps which now exist in such sections. The hospital bill will promote the construction of rural hospitals, and this bill will add medical service.

The bill further provides that a State may use Federal money together with its own funds to encourage the formation of voluntary health insurance funds by paying to such funds the premiums required for those low income families and individuals unable to pay for insurance themselves. A State plan may thus provide medical care directly or through a fund such as the one which has been successfully operated in Michigan.

The encouragement of such voluntary funds will also make available, to those middle income families who desire it, insurance against serious illness, the expense of which they might find impossible to meet in a single year.

The bill also requires State plans to provide for the periodical medical examination and the periodical dental examination of all children in public and private, primary and secondary, schools. Lack of such examination led to neglect of many of the remedial defects which were responsible for the high rejection rate in the draft. This examination will be without charge, but free treatment will be given only to those whose families are unable to pay for it, or for insurance which might cover it. Federal funds may be used for some additional services at the option of the State.

In addition, the bill provides further funds for research, particularly in the fields of dental health and neuropsychiatric problems. It authorizes buildings for such research.

Also, under the new proposal, any Federal employe who wishes to join a voluntary health insurance fund may direct the government to deduct the necessary sum from his pay and apply it directly to the fund. The government today is the only employer who will not accept such direction.

Speaking for himself and the co-sponsors of the bill, Senator Taft said: "Our proposal proceeds on a fundamentally different philosophy from that of the Murray-Wagner-Dingell Bill endorsed by President Truman (on which hearings are now taking place) and which proposes Federal compulsory sickness insurance. All classes of the population would have to pay for this insurance, in the form of payroll taxes or otherwise, so that a huge sum amounting to from three to five billion dollars a year would pour into Washington. The government would then have to set up a vast administrative organization with thousands of personnel to police the insurance system and to supervise and pay all the doctors in the United States. In effect, health service would be nationalized. A Federal bureau could tell everyone when he could have a doctor, how often the doctor could call, and whether the patient could have a specialist. Every detail of medical service would be regulated from Washington.

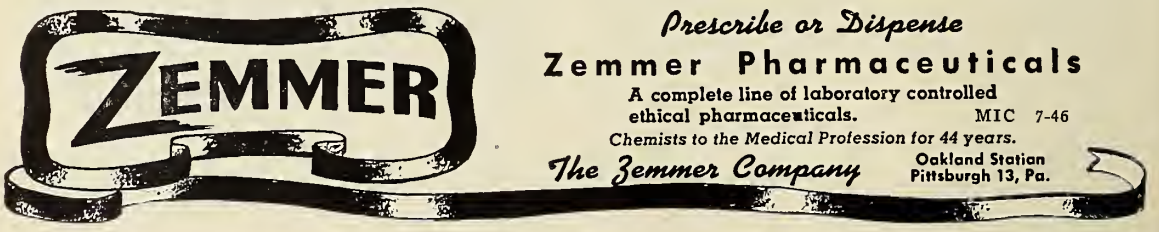
"The bill we are proposing proceeds on the theory that the United States already has a comprehensive medical service, as good as any in the world, but that there are gaps in that service, particularly in reaching the lower income groups. Our bill encourages and assists every State to fill up these gaps, building upon the existing foundation. Free service will be furnished to those unable to pay. Voluntary health insurance plans will be encouraged, so that health insurance may be available to the great numbers of those who desire it without forcing any one, patient or doctor, to abandon his present practices," the Senator said.

"Above all, the bill places the primary public responsibility for the health of the people on the States and on local governments. Medical care is primarily a local and State concern. We believe that Federal funds are necessary, but only to aid the lower income groups of the population and furnish financial assistance to States and local governments to supplement the limited funds available for help. We believe this plan is an American plan based on assistance to the needy, liberty to the individual, and a free medical profession. Only by retaining such freedom can we hope to go forward with the progress in medicine and health for which America has been distinguished," Senator Taft concluded.

THE accumulated unpaid patients' bills remain dormant until the statute of limitations erases them as an asset. If you wish to have those accounts collected without offending the patient, write.

National Discount & Audit Co.

Herald Tribune Bldg. New York 18, N. Y.



of research

—a handy reference work summarizing investigation into the complex steroid structure of Ertron and its action in the treatment of arthritis.

This book, prepared by the Medical and Chemical Research Departments of Nutrition Research Laboratories, brings the literature on the subject up to date, and describes the therapeutic and chemical uniqueness of Ertron—steroid complex, Whittier. A complete bibliography is included.

"Steroid Therapy in Arthritis" is now being mailed to the entire medical profession. Additional copies will be sent to any physician who desires them. Write to Medical Department, Nutrition Research Laboratories, 4210 Peterson Avenue, Chicago 30, Illinois.

NUTRITION RESEARCH LABORATORIES • CHICAGO

Say you saw it in the Journal of the Michigan State Medical Society

Little Joe Genius--Fact Detective

"Somep'n," said Little Joe Genius, "smells funny."

Now that was an odd thing to say because scarcely anybody has ever heard of an amusing odor. But what he meant was—that he smelled something peculiar he had smelled before, only he couldn't remember where he'd smelled it. You see, Little Genius was an experienced FACT hunter. When it came to sleuthing for BIG FACTS, Little Genius was the original Dick Tracy. He had a *nose* for Facts just as good reporters have a nose for news. And he smelled an important FACT, a BIG FACT but . . . but I'm getting ahead of my story.



Little Genius had been talking to his old friend, the family doctor, about a bill introduced in Congress . . . . named "The National Health Act of 1945." It seems that a Senator Wagner and a Senator Murray had introduced it in the U. S. Senate and Representative Dingell had introduced it in the U. S. House of Representatives. So everybody called the measure the Wagner-Murray-Dingell Bill.

Little Genius had said to the Doc, "By golly, I don't know the first thing about that Wagner-Murray-Dingell Bill."

"Little Genius," Doc had replied, "I think you had better study this Bill and then, when you figure it out, maybe you'll want to write your Congressman and tell him what you think about it. It's pretty important to *you.*"

"Did you read it?" I asked Little Genius.

"Did I read it?" he said, "I read it several times. I had to, because the first time I read it, the Bill reminded me of an English Fog that just closes around you and you can't find out what goes on. But I said to myself, 'Something in here reminds me of a BIG FACT': So I decided to find out what it was."

"Did you find the Big Fact?", I asked.

"I found it," said Little Joe Genius a trifle grimly. "I found the Big Fact in the Fog. That was what I smelled—The BIG FACT of the Wagner-Murray-Dingell Bill." He leaned forward and poked a finger at me.

"The Big Fact of the Wagner-Murray-Dingell Bill is that it is the same *political shenanigan* that the public has smelled so many times before. It's COMPULSION OF THE PEOPLE, pure and simple."

"Compulsion of the people isn't a very AMERICAN shenanigan, is it?", I asked.



"No," Little Genius replied, "it's more of a EUROPEAN shenanigan, for it makes the citizen become a CREATURE OF THE STATE. First it hypnotizes him with fancy promises of health for everybody and then binds him with the 'red tape' of security."

"This is like all the rest of those steps that lead to making the free citizen become the tamed slave of the State," explained Little Genius. *"First it takes over your health, then your wealth and then you get wise—when it's too late.* It's slow and easy but just try getting that freedom back once it's lost."

"If what you say is true I'm against this shenanigan," I said. "But I want health insurance in case I get real sick or if I have to go to the hospital. I can't afford to be without it."

"Your right," said Little Genius, "and I'm covered with the newest and best health insurance in the world. You can get it, too. It's Michigan Medical Service and Michigan Hospital Service. These are Blue Cross *voluntary* non-profit plans that supply complete protection for you and your whole family for only a few cents a day. Because these are *non-profit* plans, overhead administrative costs are small and *over 87% of the money taken in is paid out for the people's medical and hospital care*—$12,320,522 in 1945 in Michigan alone. The overhead administrative cost on the *compulsory* government plan is much higher, it . . ."

"Say, by the way," I interrupted, "what would this Wagner-Murray-Dingell Bill actually compel me to do?"

"I could read you the actual words," said Little Genius, "but let me sum them up:

1. All the people who work for wages or salaries *must* join.

2. All the people *must* pay 3% of their salaries on the first $3,600 earned; that's *taken* out of their pay check. (The total yearly cost is estimated at over Four Billion Dollars.)

(Continued on Page 860)



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Editorial Comment

1946 YEAR OF DECISION

How Do They Do It? The question, "How does the medical profession develop the spirit of '46 in the State of Michigan?" is readily answered by brief reference to reports appearing in the March, 1946, issue of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. As has been pointed out before in the *Pennsylvania Medical Journal,* the medical profession in Michigan is particularly well unified and through the "war years" has regularly paid each year, in addition to its annual dues of $12, an extra assessment ranging from $10 to $25, thereby providing the funds for the advancement through several service channels of greatly improved public appreciation of the purposes and objectives of the society.

Michigan's Postgraduate Medical Education Fund at the end of the year 1945 showed a balance of $23,400; the balance in the Public Education Fund was $12,150. Their budget for the purposes of the latter fund in 1946 is $31,000 and the extra assessment per member in support thereof is $10.

As the result of initial and continuously loyal membership support, the Michigan State Medical Society pioneered to establish Michigan Medical Service which, in the year 1945, disbursed a total of $4,149,000, and since its inception, a total of $13,634,000, representing approximately 88 per cent of the income for the provision of voluntary insured services to subscribers. Administration costs approximated 11 per cent.

Michigan Medical Service, similar to our Medical Service Association of Pennsylvania (MSAP), recently signed a contract with the Veterans Administration to act as fiscal agent between the government and Michigan doctors who desire to render medical care to veterans. The Michigan State Medical Society was ready for this important assumption of a government contract because it had previously developed "a uniform fee schedule for all governmental agencies, thereby establishing a minimal intrinsic value of medical service."

The Michigan State Medical Society (4,686 members, 1,245 having been in military service) recently created the Michigan Foundation for Medical and Health Education. In September, 1945, this foundation, in need of funds, asked for pledges and payments to assure its activities for the following twelve months. At the end of the fifth month $48,000 had been pledged or paid. Of this total sum, 30 physicians living in 14 different Michigan towns gave $34,000, and Michigan Medical Service gave $10,000.

So far as the medical profession of Michigan is concerned, is not the answer to the question "How do they so admirably meet the spirit of '46?" to be found in the profession's remarkable demonstration of individualized loyalty in support of practical and effective public relations planned by the representatives of the organized profession who co-operate with state and local governments and the public?—*Pennsylvania Medical Journal,* May, 1946.

DINGELL BILL, A "FORGOTTEN CAUSE"

Although public health insurance has been the subject of bitter controversy among medical groups and in Congress, the public's opinion as to how the program should be carried out has not crystallized very definitely as yet.

The great majority of people, a poll shows, think the idea of having insurance to take care of doctor, dental, and hospital bills is a good one. But the public does not seem to have made up its mind as to how to pay for such a plan.

The general public has not yet become familiar with the Wagner-Murray-Dingell medical insurance bill. Fewer than four in every ten persons polled had heard or read about it.

Opinion is almost evenly divided on whether people would get better medical care than they are now getting if the government took over the job of administering a health insurance program.

One indication of the generally uncrystallized public opinion can be seen from replies to the question:

"What do you think should be done, if anything, to provide for the payment of doctor, dental, and hospital bills for people in this country?"

The replies show a wide variety of ideas. A total of 17 per cent suggest voluntary health insurance programs, such as the Blue Cross hospitalization plan; another group, comprising 12 per cent, proposed medical insurance under Social Security; a third group of about equal size (11 per cent) suggest special grants for hospitals and clinics to care for the needy. Another group of 6 per cent propose private or community charity, and 12 per cent give miscellaneous suggestions. Of the remainder, 16 per cent say they don't know what

(Continued on Page 854)

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DINGELL BILL, A "FORGOTTEN CAUSE"

(Continued from Page 852)

should be done, and 26 per cent do not think anything should be done.

Other questions put to voters in the poll follow:

"Just making a guess, about how much did you pay for doctor, hospital and dental bills during the past year?"

Nothing	16%
Under $25	21
$25 to $50	16
$50-$100	16
Over $100	28
Don't know	3
Median average	$50

"How much would you be willing to pay a year for you and your dependents to join a health insurance plan which would pay all doctor, hospital and dental bills?"

Nothing	9%
Under $25	30
$25 to $50	23
$50-$100	15
Over $100	4
Don't know	19
Median average	$30

"If the government handled a health insurance program, do you think you would get better medical care or not as good medical care as you are now getting?"

Better	32%
Same	23
Not as good	35
No opinion	10

—GEORGE GALLUP in *The Washington Post,* May 19, 1946.

The Wagner-Murray-Dingell proposals would establish a political appointee, the Federal Security Administrator, as dictator in all matters relating to health. Working under him the Surgeon General of the Public Health Service would be authorized and instructed to:

1. Hire doctors, specialists, dentists, nurses, laboratory technicians, and establish rates of pay.

2. Establish fee schedules for physicians' and dentists' services.

3. Fix the qualifications for specialists.

4. Determine the number of individuals for whom any doctor or dentist may provide service.

5. Determine what hospitals or clinics may provide service for patients and under what conditions.

6. Provide for all wage earners and their dependents and for all self-employed persons and their dependents—doctor, dentist, home nursing, and laboratory care and hospitalization.

It is estimated that the cost would be more than four billion dollars annually. One man—the Surgeon General—would direct the spending of this stupendous sum. Based on experience in other countries, it would take at least 300,000 lay bureaucrats to administer this system of politically distributed medical care.

Doctors know that an easier method must be provided for paying the costs of unusual or prolonged illness. That is why so many prepayment plans and insurance programs are being developed. Given reasonable time for expansion, these plans and programs will bring adequate relief.—STEGEN in the *Journal Tennessee State Medical Society,* May, 1946.

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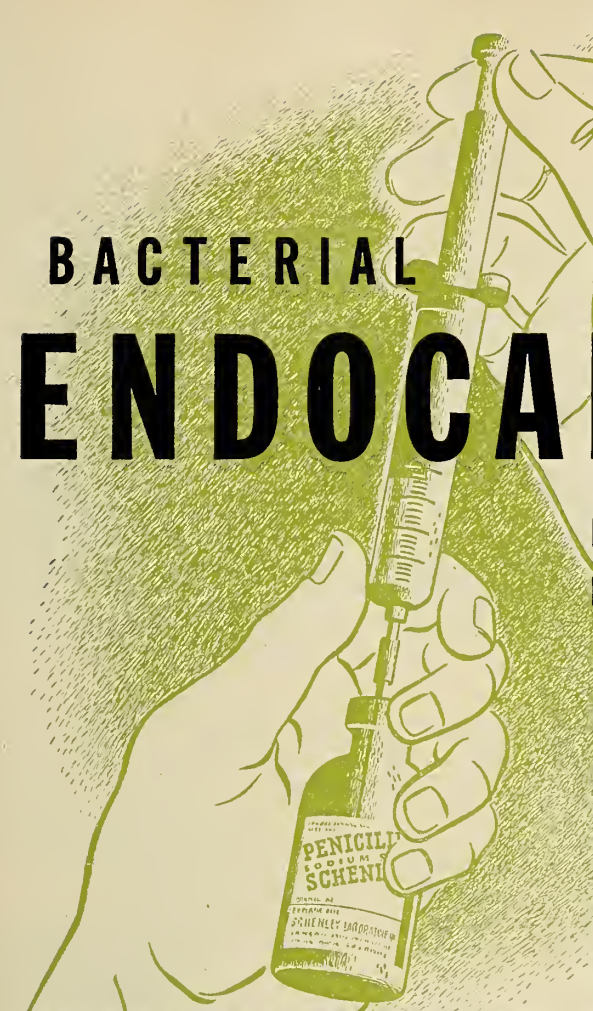
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DAWSON, M. H., AND HUNTER, T. H.: *The Treatment of Subacute Bacterial Endocarditis with Penicillin: Results in Twenty Cases, J.A.M.A. 127:129 (Jan. 20) 1945.* . . FAVOUR, C. B.; JANEWAY, C. A.; GIBSON, J. G., II, AND LEVINE, S. A.: *Progress in the Treatment of Subacute Bacterial Endocarditis, New England J. Med. 234:71 (Jan. 17) 1946.*

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War Medicine

SURPLUS ARMY HOSPITALS RELEASED TO VETERANS ADMINISTRATION

The Army's great general hospitals, built to the latest medical and surgical standards for the care and treatment of its wounded and sick during the war, are being released as rapidly as the decrease in the patient load justifies and offered first to the Veterans Administration for its rapidly expanding program for medical care for veterans.

The transfers have been made as part of the Army's comprehensive plan, devised before hostilities had ceased, to effect a smooth transition when responsibilities for the care of the sick and wounded were transferred from the Army to the Veterans Administration.

The War Department program is being carried out through close co-operation between Major General Norman T. Kirk, The Surgeon General, and Dr. Paul R. Hawley, Medical Director of the Veterans Administration, who before retirement from the Army as a Major General, was Chief Surgeon, European Theater of Operations.

"Of 25 hospitals we have earmarked for Veterans Administration at their request 11 have been transferred complete to the last scalpel," General Kirk announced. These 11 hospitals comprised 24,000 beds while the Medical Department was operating them. Because of a lack of sufficient personnel, the Veterans Administration at present is operating these hospitals at less than the above maximum capacity.

When three general hospitals housing paraplegic centers, McGuire at Richmond, Virginia; Birmingham at Van Nuys, California; and Vaughan at Hines, Illinois, were released to the Veterans Administration on April 1, 1946, special equipment for the treatment of the paraplegic patients remained in the hospitals in addition to the standard equipment turned over in all cases to the Veterans Administration. A part of this special equipment included wheel chairs, walking apparatus, special headphones for built-in radios and shop facilities used in training the patients who are paralyzed in the lower half of their bodies.

The treatment of the 700 patients in these centers continued uninterrupted despite the transfer of the hospital from Army to Veterans Administration. The patients received certificates of disability discharges from the Army and immediately became patients of the Veterans Administration without leaving their beds.

In addition to giving the Veterans Administration priority on any surplus Army hospital installations, the War Department plan also includes placing Medical Corps physicians, surgeons, nurses, technicians, orderlies and dietitians on temporary duty in Veterans Administration hospitals so that the care of the wounded may continue uninterrupted. Continuing, also, treatment to men considered enough improved to warrant their discharge from the Army, hospital staffs have remained on duty until relieved by Veterans Administration personnel, to care for these veteran-patients who received their discharge upon the transfer of the hospital.

General Kirk in January, 1946, instructed commanding officers of hospitals to replace military personnel other than doctors and surgeons with civilian workers whenever possible. Thus, these civilians could transfer to Veterans Administration employ and insure smooth operation and care of patients when the hospital changed hands.

The Veterans Administration has also been authorized to place employes in Army hospitals to observe specialized professional techniques practiced by the Medical Department staffs.

More than 5,000 veterans have received treatment and care in Army hospitals after they received their discharge. At present, approximately 2,030 veterans are receiving treatment under these conditions. This care will continue until the expanding medical program of the Veterans Administration is able to accommodate these patients.

In addition to providing care and treatment for veterans, the Army is also retaining the responsibility for the care of more than 3,000 tuberculosis patients. Normally, these men would have been discharged and released to Veterans Administration control. However, since the facilities for their best care are not available in Veterans Administration hospitals at present, the Army will continue its treatment of these patients until the Veterans Administration acquires the personnel necessary to bring the treatment level to that of both the Medical Department and the Veterans Administration.

Army hospitals also stand ready with outpatient treatment for veterans with service-connected disability in isolated areas or emergency cases where civilian hospital facilities are not immediately available. Outpatient treatment for veterans is also practiced in Puerto Rico, Alaska, and the Philippine Islands.

Several Army hospitals were erected by the Army with an eye toward future occupancy by the Veterans Administration. Both Vaughan and McGuire General Hospitals, housing paraplegic centers, were constructed with this in mind. In fact, Vaughan General Hospital was erected upon Veterans Administration property. Although the wards and buildings were built according to Army specifications, they can be changed in minor aspects to fit Veterans Administration needs. Kitchens, mess halls and clinic rooms are a few of the features that vary.

The eleven General Hospitals which already have been released to the Veterans Administration with all equipment are: Ashburn, McKinney, Texas; Foster, Jackson, Mississippi; La Garde, New Orleans, Louisiana; Thayer, Nashville, Tennessee; Winter, Topeka, Kansas; Birmingham, Van Nuys, California; Finney, Thomasville, Georgia; McCloskey, Temple, Texas; McGuire, Richmond, Virginia; Nichols, Louisville, Kentucky; and Vaughan, Hines, Illinois.

(Continued on Page 860)

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Say you saw it in the Journal of the Michigan State Medical Society

(Continued from Page 858)

ARMY AND NAVY ACT JOINTLY TO RELIEVE MEDICAL AND DENTAL OFFICER SHORTAGE

The War and Navy Departments announced joint action taken to relieve a very serious shortage of medical and dental officers which now exists in the combined requirements of the Army, Navy and Veterans Administration.

Regardless of date of entry on active duty, only a two-year period of service after July 1 will be required of all Army Medical Corps Officers including graduates of the Army Specialized Training Program except critically needed specialists. A two-year period of service will be required for all Navy graduates of the Navy Medical V-12 Training Program, who after March 1, 1946, were or will be ordered to active commissioned duty upon completion of internship. Navy doctors already separated will not be recalled. Under the Army's new two-year policy, it is estimated that approximately sixty days after July 1 will be required to complete the release of approximately 3,000 Army doctors affected by the change.

By the above action the requirements both of the Army and Navy can be met and in addition the Army can make available to the Veterans Administration approximately 1,000 badly needed medical officers and the Navy about 500.

In order to meet the minimum requirements of the Army and Navy for dentists, and to establish comparable discharge criteria for both services, the War and Navy Departments have agreed that all dental officers partially or wholly assisted in their education by the Federal Government in the ASTP and V-12 programs and now on active duty upon completion of such education, will for the time being be released upon completion of three years of commissioned active duty service. Navy dentists already separated will not be recalled to active duty. The length of service required for Army dentists now on duty other than ASTP graduates has been reduced from 39 to 36 months effective immediately.

The Navy will shortly make available to the Army approximately 800 dental officers. When this transfer is completed, the period of service required of all dental officers will be further reduced. Before discharge requirements can be reduced to two years for both services, the Army will require additional dental officers. To meet this need, Selective Service has been asked to procure 1,500 young dentists, who are being accepted with the understanding that no more than two years of service will be required from them.

Transfers of dental officers from the Army or Navy to the Veterans Administration will not be required.

It should be noted that extension of the period of service required for Navy doctors and dentists applies only to those whose education was subsidized by the Federal Government in the V-12 or the ASTP programs.

LITTLE JOE GENIUS—FACT DETECTIVE

(Continued from Page 850)

3. A new Government Bureau, will be set up to *dictate* what doctors *are allowed* to doctor you under this plan.

4. This same Bureau *dictates how much* the Doc is allowed to charge.

5. This Government Bureau *approves* or *disapproves* the doctor's prescriptions.

6. A government official will *decide* whether you will be *allowed* to consult a specialist when you are sick.

7. This official will *tell you* what specialist you *are allowed* to see.

8. This Bill directly or indirectly puts *all* the doctors and nurses under the *control* of a government *appointed* man, who doesn't even have to be a doctor."



"That's *compulsion,*" fumed Little Genius indignantly, "that's *government-operated medicine,* that's *dictatorship* and that's the *'rat'* I smelled."

"It's Political Medicine!", I said. "It reminds me of a saying I heard:

> "May Government of the people,
> By the Bureaucrats,
> For the Politicians,
> Not cause the liberty of a free people
> To perish from the earth."

"Amen," said Little Genius, "but 'sayings' aren't enough. We've gotta *stop* this Bill and I'm going to write my Congressman right now. *Doc doesn't have to worry* if this Bill becomes law—he'll be practicing medicine from 9:00 a.m. to 5:00 p.m. on a salary. But ME, I'm going to be *paying* the *BILL* and getting less service. I'm going to be the *Four Billion Dollar fall guy* that pays *more* and gets *less. I'm* the sucker on this deal. I don't like it and I'm going to tell my Congressman so."

"Me, too," I agreed. "Hand me that letter paper!" So two strong letters of protest against the Wagner-Murray-Dingell Bill went to Washington, D. C.

Follow the example of Little Joe Genius. Write your Congressman in Washington, D. C.

This article, in pamphlet form, is being distributed to the laity by members of the MSMS and the Auxiliary. It is the second in a series to be presented in THE JOURNAL. Little Joe Genius will talk about the progressive health program of the doctors of medicine in the next issue.

Special Notice to Members

This Disability UPG20 Program shown on the opposite page, extended to the Michigan State Professional Groups is a program that provides protection which gives Lifetime Benefits and is not subject to cancellation on account of age leaving you without protection when your loss of time is most valuable. It pays benefits for one day or more and covers permanent total disability. This UPG20 Program pays for every injury or accident, even Commercial Air Line travel is fully covered. It covers all sickness and every disease except insanity and venereal diseases. The maximum benefits are $600.00 monthly and its minimum benefits are $200.00 monthly for any illness. Accident benefits pay double indemnity for travel accidents on a common carrier, excepting air travel, which pays only the regular indemnity benefits.

To broaden the benefits while this UPG20 Program is in operation, the following limitations, common to most policies, have been omitted and are not a part of these policies.

(1) The Company's right to cancel the policy at any time—(Standard Provision No. 16).

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(3) The Company's right to refuse renewal of policy to any individual practicing member of your group is forfeited except for non-payment of premium on or before due date.

(4) The Company's power to impose a Rider, eliminating the benefit for something that may happen or develop to render you an undesirable or un-insurable risk, is canceled thru the elimination of each of the above.

The Michigan enrollment is proceeding most satisfactorily, but it is the desire of the Companies, not only to conduct the enrollment in the manner found to be most successful for completing the group, but with full consideration for the policy and practice of the Michigan Professional Associations mentioned.

Most Professional Groups, Associations, or Societies find it inexpedient to make specific endorsement of any company or plan to its members. It is the practice of the Mutual Benefit Health and Accident Association and the United Benefit Life Insurance Company both of Omaha, to submit their Disability Plan to the individual members of the group for their personal consideration. This has proven to be the most successful way to complete the enrollment of members of these groups since it brings about a decidedly better understanding of the plan to the members and, thereby, increases the ultimate total enrollment.

Therefore, should any Authorized Registrar, or Mutual Benefit Salesman represent that he is from either of the designated Associations, or that this plan has been endorsed by either Association, will you kindly report same together with the name of the representative to State Manager, Professional Group Department, Room 1142, Book Bldg., Detroit, Michigan.

Mutual Benefit Health and Accident Association, Omaha

Say you saw it in the Journal of the Michigan State Medical Society



The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

VOLUME 45 JULY, 1946 NUMBER 7

A Study of the Construction, Impairment and Reconstruction of the Pelvic Floor

An Engineering Problem

By Channing W. Barrett, M.D., F.A.C.S.
Chicago, Illinois

Construction

The muscles in animals meet the varying needs of sphincter control and support and tail manipulation as they assume different degrees of the upright position. In the human species, the sphincter function is retained and amplified, the tail-manipulating muscles develop other uses as the tail becomes atrophied, and the supporting structures reach their highest development to meet the needs of the upright position. This arrangement of muscles and fascia to meet the needs of support encroach upon the space used for childbirth, so that although support is quite adequate, as constructed, many injuries take place and impairment follows, as will be seen.

To get full value from the study of this changing and changed construction, one must comprehend the purpose for which these changes have taken place. An animal that lives in a tree and uses the tail as a support and swing, or a ground animal that uses the tail as a fifth leg, as the kangaroo, or for protection from pests, as the cow or horse, cannot give up all of these coccygeal muscles for support. In the human, where the need of support reaches its high point and the need of tail muscles ceases, we find the group of tail muscles having been converted into broad flat muscles closing the pelvic outlet, and becoming a supporting structure in this region, while in four-footed animals little support was needed.

Andreas Vesalius as early as 1555 described the main supporting structure under the term "Musculus sedem attollens." Sappey in his work published in 1869, and quoted by Thompson, says "the levator ani is one of those muscles which has been studied the most, and at the same time, one about which we know the least." Which, however, is not to say, "the more it is studied, the less is known about it." The works of Savage, Goffe, Hart, Deaver, Anson, Curtis, and others, present the main facts of anatomical construction in a way to be understood by the gynecologist. Thompson and a host of workers make these essentials very plain and pursue the comparative myology away beyond the possibilities of this paper. However, in order to have a working knowledge of the structure of this region, we must follow their structural and functional changes close enough to grasp the meaning and purpose of these environmental changes.

The portion of the abdominal wall which the pelvic floor constitutes is known superficially as the perineal region, as other portions are known, such as the umbilical, inguinal, epigastric, hypogastric regions, et cetera, except that in this region there are more definite outlines, being limited ventrally by the symphasis, dorsally by the coccyx, and laterally, the greatest width, is marked by the tuberosities of the ischial bones. These outlines of a quadrilateral opening are completed by the bony and ligamentous structures which connect these four outstanding points. This area of definite outline is 3.5 to 4 inches in greatest antero-posterior

Read before the Muskegon County Medical Society.

Professor Barrett, a Michigan man, served as Major in Base Hospital 36 in the First World War.

diameter, increased by obstetrical displacement of the coccyx, and 4 to 4.5 inches transversely, constituting about 16 square inches of the abdominal wall soft parts to guard against extrusion, and non-physiologic intrusion upon abdominal and pelvic contents, in this most vulnerable portion of the abdominal wall. This somewhat rounded quadrilateral space is divided into an anterior or urogenital trianagle and a posterior or anal triangle by an imaginary line drawn betwen the two tuberosities and marking the posterior border of the superficial transversus perinei muscles. There is such lack of unison in the term "perineum," and the term "perineal body" is so mythical that it seems best to think of the structures in this area as the pelvic floor or caudal wall.

To the extent that the upright position is assumed, the subject is deprived of gravity to keep viscera away from the pelvic floor, as is the case in four-footed animals, as a means of preventing protrusion. In fact, gravity is now added to other forces to cause protrusion. The sitting position and the absence of the tail shutter of this region subjects these parts to violence and intrusions not seen in four-footed animals.

A study of comparative myology by Holl, Meyer, Thompson, Hart and many others shows the nicety of change which takes place in the tail and sphincter muscles of the lower animals to meet the needs of the upright position. The essential thought of these men cannot be conveyed in any more illuminating way to the worker in gynecology than to quote Thompson. "In the human subject, in whom the erect posture necessitates special modifications, the functions which the pelvic floor is called upon to perform are widely different from those in animals, in which the long axis of the body is horizontal." "In most mammals the weight of the *abdominal viscera* is largely borne by the ventral wall of the abdomen, but in man the weight (of abdominal viscera) is sustained mainly by the floor of the pelvic cavity (also floor of the abdominal cavity) and this is accordingly specially modified to give active support to the burden which has been transferred to it."

The pelvic diaphragm* (Meyer), is a funnel-shaped structure, so changed from the tail muscles as to form by a fusing of the levator ani muscles in the median line, a complete closing structure to the lower abdominal outlet, as the broad ventral muscles constitute the anterior abdominal wall. It should be appreciated that these pelvic floor structures have an added importance over the ventral muscles from the standpoint of support because of their being the lower abdominal wall. Surgically this region has gained a great deal of prominence by reason of the frequent tendency to herniation, due not only to the low position, but also to the fact that this supporting structure is traversed by "clefts" or "faults" for the passage of the terminal ends of the urinary, genital and digestive tracts, the walls of which normally lie in contact, but which for normal functioning, chiefly due to childbirth, open up from moderate to great size. These latter enlargements furnish a great source of impairment of the pelvic floor.

While the so-called pelvic diaphragm as composed of modified tail muscles becomes very important as a structure of support, Berry Hart and John Symington say that the pelvic floor is a thick structure composed of all of the soft structures that close the outlet of the pelvis. This should be visualized as a definite musculofascial structure of three layers of muscles and five layers of fascia to which the skin might be added. We would then not only lay stress upon the distinctly supporting layer and the sphincter layer divided into two layers, but we would call attention to the interrelation of the two primary layers. In some mammals only one sphincter layer exists, but in the human the sphincter layer is divided into the superficial and deep layers, the former consisting of sphincter ani and the three muscles in the superficial perineal interspace, superficial transversus perinei muscles, the constrictor vaginae or sometimes called the sphincter vaginae and the erector clitoridis or ischio cavernosis, and the latter, the deep layer of the sphincter layer, consisting of the compressor urethrae muscles and the deep transversus perinei, which lie in the deep perineal interspace lying between the two layers of the triangular ligament: (considered by some to be the urogenital diaphragm, but has no more reason to be called a diaphragm than any part of the ventral wall chosen at random.)

The triangular ligament (the two layers of deep fascias)
1. the superficial, or inferior or anterior layer of the triangular lig.
2. the deep or superior, or posterior layer of the trinagular lig.

*The word "diaphragm" is a misnomer, as it is used in this region, because of its fancied resemblance to the real diaphragm, whose function it entirely fails to simulate, and is probably best interpreted as an essential part of eight layered musculofascial caudal wall, the other layers being also essential.

The above-mentioned muscles with their covering fascias, while belonging to the sphincter layers, furnish considerable accessory support to the supporting layer.

The so-called pelvic diaphragm, consisting of the modified tail muscles broadened to fill the complete bony outlet with the fascia above and below, is accredited the function of the main support, yet to this support must be added the support of all the accessory muscles and fascias, and any fibrous connective cellular tissue, filling in the pelvic outlet. One should not depreciate the tone and value of all the connective and cellular tissue interposed around the viscera and muscles.

The importance of sphincter control is best understood when we take into account not only the sphincter muscles, but the accessory sphincter aid given by supporting muscles.

1. The external sphincter ani
   1. Sphincter ani externus subcutaneous
   2. Sphincter ani externus superficialis
   3. Sphincter ani externus profundis
2. The internal sphincter ani. A considerable thickening of circular muscular structure in the lower end of the rectal and the anal wall.
3. Sphincter recti—the pubo rectalis portion of the pubo coccygeus. This is a very useful adjunct to the sphincter ani and makes a very respectable sphincter in the absence of the sphincter ani.
4. The sphincter vaginae, as the constrictor vaginae is sometimes called.
5. The pubo rectalis becomes the constrictor or compressor vaginae in extreme contraction.

It will be seen then that injury to or laxness of these muscles will not only affect sphincter control, but will impair the support of the pelvic floor, as no structure running from the pelvic wall to median attachment is to be undervalued as a support.

The pelvic floor, composed of the modified pubo coccygeus, the illio coccygeus, also called the obturato coccygeus, and the coccygeus or sometimes called the ischio coccygeus blended and fascia enclosed, carries the weight of visceral contents, taking the load off the sphincter muscles, but also carries the viscera terminals themselves to considerable extent, and by a snug hold upon the viscera, prevents herniation of the attached viscera.

In spite of the thorough and oft-repeated studies of the pelvic floor, there have been and still are many misconceptions—

1. Of the anatomical structure of the pelvic floor.
2. Of the function of this structure if, and when anatomically understood.
3. Of the supporting importance of these structures.
4. Of its importance as a part of the abdominal wall, subject as are other parts of the abdominal wall to hernias.
5. And above all, especially subject to hernia by reason of its being the low part of the abdominal closure and being traversed by the terminal ends of three tracts, th functions and disfunctions of which subject these visceral terminals and the muscles and fascias of the pelvic floor to such stretching and many tears, permitting many herniations.

Much misconception would be overcome if we would view the abdominal cavity as the large cavity of the body containing many viscera, with a complete abdominal wall composed of bony structures and soft parts. There is a constant struggle under varying conditions between these walls restraining, and viscera escaping through available openings or weak places, constituting hernias, the vulnerable areas being the pelvic floor, the inguinal region, the umbilical region, the femoral region and the diaphragm and operative sites.

If we would consider this cavity and its walls impartially, we could think of the contents exerting force cephalad, where it is guarded by the diaphragm, dorsad, guarded by dense bony structures, ventrad, where there is a wide expanse of flat muscles and fascia with some weak points, laterad, where there is the same broad muscles with less tendency to hernias, and lastly, caudad, which end is narrowed by bony structures to the pelvic cavity, leaving a narrowed opening closed by soft parts, of three layers of musculature and five layers of fascia, so constructed as to make a fairly adequate closure, but which is somewhat subject to hernias by the natural openings and is greatly impaired by childbirth, which stretches and tears the pelvic floor structures comprising this caudal closure, to the full size of the bony outlet, leaving varying degrees of tendency to hernias. This tendency to hernia is greatly increased by the upright position. It is important, however, to remember that the nature of the protrusions is not changed from hernias into prolapses by the position of the caudal outlet, which in the human takes a low position, and in four-footed animals takes a high position, and the nomenclature should not be emasculated or perverted. A condition of the abdominal wall, permitting abdominal contents to pass through, is a hernia, and the protrusion of

abdominal contents through a natural or acquired opening constitutes herniation. Hernias and herniation are a relation of the abdominal contents to the abdominal wall, and the caudad wall is more subject to hernias because of its low position and natural openings. The greatest etiologic factor, however, is childbirth, as shown by the comparatively few cases of hernia seen in non-childbearing women, even in advanced age, and the great frequency of herniation of bladder, uterus and rectum in childbearing women. Very few escape some injury, but in many cases the injury is not so great as to result in disabling herniation; on the other hand, perhaps more endure moderate to extreme degrees of disability, without seeking or obtaining relief. Reasons for this would not be hard to find, but would here take us too far afield.

So great is the effect of the above forces that the small area of the pelvic floor becomes a more frequent site of herniation than any other or all others combined.

If one is now ready, from previous studies of the pelvic floor, of which there are many descriptions, and the suggestions of structure and functions which we have set forth, to accept the pelvic floor area on approximately the same basis as he accepts the anterior abdominal wall area, constructed for support subject to hernia, he is ready to accept the first part of the title of this paper, "The Construction of the Pelvic Floor." If one can see in this structure only lifters of the anus, in the modified tail muscles called the levator ani muscles; if he can see only weak apertures from the edges of which attached viscera prolapse; if he cannot place protrusions through the anterior or posterior pelvic floor cleft exactly on the same basis as he would view protrusions through the umbilical or inguinal clefts; if he cannot look upon the muscles, fascias and all tissues of this interbony outlet as the pelvic floor and therefore as the lower abdominal wall, then he is ripe for a serious study of the best authors on pelvic floor construction before he can understandingly grasp the other two horns of our title, namely, "Impairment and Reconstruction of the Pelvic Floor."

Impairment of the Pelvic Floor

Having seen that the caudad end of the abdominal wall is composed of the pelvic floor, which may be at the low point, as in the human, or at a high point, as in four-footed animals, it will be seen that protrusions are not named by the direction out of the abdomen that they may take, but by the fact that abdominal contents are at this area passing through the abdominal wall. These protrusions are rightfully termed hernias of the pelvic floor, but custom has continued to call them prolapses. We are now ready to consider, for those who are prepared to follow this line of thought, how a portion of the abdominal wall, usually so satisfactorily constructed, becomes so impaired that it is by far the most frequent site of any in the abdominal wall for hernias.

Impairment implies a decrease from a better to a worse condition, and so to make the picture complete, we may be permitted to use the word "defect" to apply to a smaller group of cases which have never attained a satisfactory degree of efficiency. In showing variation in strength or form in this region, developmental processes are but paralleling the development in other regions. In such departures from normal as to be defective, the defect is of greater concern by reason of the impairment which may follow, much as it follows in an acquired defect.

Impairment of this caudal portion of the abdominal wall is vastly of more importance than a tear of what was once thought to be the perineal body. Emmet announced in 1883 that the perineal body was of no significance whatever, and we are not alone in observing that his theories as to vaginal sulci operations were equally inefficacious. If we speak of impairment of the pelvic floor it is to follow a usual custom, and not to minimize this portion of the abdominal wall. Like the ventral portion of the abdominal wall, the caudal portion may be impaired by overstretching, by ascites, by pregnancy, or by a large tumor, or an accumulation of fat, etc. Like ventral structure, such stretching may result in a low, lax, loose pelvic floor that loses its hold upon viscera that pass through it.

By far the most frequent cause of pelvic floor impairment has its beginning in childbirth injuries, but occasionally with other injuries. The injury is far from being the whole impairment. Two women may have the same amount of pelvic floor tear. One has a sheltered life, rest, recumbent position frequently, involution favored, freedom from hard labor and heavy lifting, and the remaining pelvic floor is adequate, after good involution of the remaining portion, at least for a long time. The other woman has the care of

her child and a large family, heavy household duties, or perhaps she takes her child and goes out to the field to plant, hoe, or harvest a crop, or to engage in some other exacting occupation. The heavy organs on uninvoluted ligaments rapidly take advantage of the supports weakened by tear, and further impairment takes place rapidly and herniation ensues.

There are natural impairments which under favorable conditions may be temporary, but which may be prolonged so that they become permanent. Under this head we must mention the heavy structures and the lengthened ligaments and carrying structures. The loosened hold that one structure has upon another directly after childbirth favors sliding. The movement causing more loosening, must be visualized. The natural stretching of the vagina and surrounding pelvic floor structures affording opportunity, and the uterus and vagina temporarily parallel with the longitudinal axis of the body, is a temporary condition calling for rest in bed, Sims and knee-chest posture. Sliding of heavy structures is easily favored by viscid discharges. These natural conditions, if not safeguarded, may easily be turned into permanent impairment.

The impairment found in any given case is made up of the original injury, plus failure of involution, not merely of the uterus but of all carrying structures and all structures to be carried, failure of involution of the bladder, the vagina, the rectum, of all connective tissues, blood vessels, lymphatics, peritoneum, abdominal wall, etc., and plus all progressive and eventual changes and developments which have resulted in moderate to extensive herniations, and no less those changes which have resulted from the developing hernation. This makes a series of disabilities not accounted for by the terms "laceration of the perineum," or "relaxation of the perineum," or "prolapse of the uterus," for there has developed far beyond these, a herniation more or less complete of all adjacent structures, which will require, as a key operation, a pelvic floor hernioplasty and frequently one or more accessory operations.

A musculofascial structure, as has been described, furnishes a complete wall for the caudad end of the abdominal cavity. These structures have a circumference origin and are inserted into their fellows centrally, to the side of the vagina, to the central tendon, to the side of the rectum and anus, to the median raphe, and some insertions are as far back as the coccyx and tip of the sacrum, and Curtis points out that some fibres meet as far forward as the urethra, making a complete closure except for clefts for the passage of tracts whose walls normally lie in contact. As the time for delivery approaches, these structures have become soft and succulent, with increased capacity for stretching. There is, however, a vastly varying degree of preparation. In some cases these tissues seem to me made for getting out of the way of the oncoming head, and this is done with facility and without injury. In another case, the head knocks, but no door is opened. There seems to have been no preparation and there is little stretching. The outlet seems to have no facility for getting located for force to be applied in the right place. A narrow pubic arch forces the head back of the normally located outlet. Whatever enlargement we get is by incision or tear. Fortunately, most cases that do not fall into the first class, are found in between these two extremes with wide variation. Some of these cases tax the capacity of any and all methods to deliver the child without severe trauma. It is perhaps unwise to narrow our resources by the rejection of any means of aiding delivery, but long observation has led me to the opinion that side episiotomy comes very close to ranking as Enemy No. 1 in creating the trauma factor of impairment of the pelvic floor. A median pelvic floor section offers many advantages in freedom of damage and ease of repair, but is claimed by some to offer greater risk to the anorectal structures. Too early use of the forceps is a close second. Sometimes the head is piloted skillfully and safely without tear of the muscles, and then wide shoulders, perhaps less skillfully handled, produce almost any of the known tears.

More common tears are small median tears that separate the attachment of the superficial transversus perinei and bulbo cavernosis from their central tendonous attachment. This may free the insertion of that portion of the sphincter ani which inserts into the central tendon and this allows the anus to be pulled backward. The tear may extend backward involving some or all of the circular fibres, thus resulting in weakness or complete failure of sphincter control. The median tear may extend deeper, freeing the levatores from the central attachment, allowing lateral displacement and moderate to extensive enlargement of the anterior pelvic floor cleft. The muscles and

fascia may be loosened from their vaginal wall and anorectal wall attachment, giving easy opportunity for sliding and herniation of one or both terminal structures. Instead of a median tear, the injury may take place on the sides moderately or extensively damaging the muscles and fascias of the pelvic floor; this may take place on one or both sides. These side tears may take place far enough forward so as not to combine with a median tear, but on the other hand the tear may proceed in the median line separating structures moderately, then running to right and left sulci, one or both doing a variable amount of injury to the muscles and fascia, or separating them, on either or both sides from the vagina and anorectum. We have known the vulva cap to be lifted from the lower end of the vagina, and also have known the upper end of the vagina to be torn from the cervix and pushed down by the oncoming head. Great damage has been done by applying forceps outside the cervix. The head has been known to deliver through the perineal structure between the rectum and vagina and through the anorectal wall. Much damage is done by stretching and tearing of the pubocervical, and vaginal and rectal fascia as well as the uterine liagments, and the vaginal, and the rectovaginal walls. These may be visualized as the immediate impairments of trauma. Some of them are moderate, and as stated, under favorable afterconditions, may give little trouble for many years. Others are so extensive as to make the patient an invalid, and even practically bedridden until properly repaired. Some are easily detected at the time, but others are occult.

These impairments, mild as they sometimes are and severe as they sometimes may be, are augmented until to the disability of the injury is added mild herniations, which may be designated by the terms cystocele, urethrocele, colpocele, rectocele, hemorrhoids, or may develop, sometimes rapidly and sometimes slowly, into extensive pelvic floor hernias consisting of bladder, ureters, vagina, uterus, rectum, and perhaps cul-de-sacs through the anterior cleft and/or the rectum, mesorectum, sigmoid and mesosigmoid, posterior cul-de-sac and small viscera through the posterior cleft. Occasionally a case is seen in which there is no supporting structure from the symphasis to the tip of the coccyx. Usually this is after unsuccessful operations have been performed. In some of these cases there are fairly good pelvic floor muscles and fascias retracted to the side. It is for the experienced or venturesome to recover them and make adequate supports of them, but let us remember that environmental forces brought these structures about for the upright position without knife or sutures, but it took a long time; perhaps it can be repaired in shorter time by proper gynecologic surgery.

Time will perhaps not permit us to trace all the steps from the primary traumatic impairments to the secondary developments that mark the extreme impairments with which our subject must deal. Suffice to say perhaps that the secondary development is set in motion by the trauma that furnished the primary impairment, so moderate as to escape notice in some instances. Added to this primary cause is gravity, the caudad end of the abdominal wall being the lowest portion of the wall. Next we might mention increased pressure, such as increasing fat, ascites, tumor, straining, lifting, coughing, hard labor, long hours of toil, a fall, pressure between objects, lifting a sick member of the family, et cetera.

The development of these herniations does not leave the primary traumas as they were. Herniation structures by their push, and protrusion, and retraction, their come and go, stretch and weaken and change the wall structures which constitute the hernia.

This picture might not be complete without a review of the disabilities which may ensue, but if we undertake to point out and discuss in detail the harm that this herniation is to the bladder, how it strangulates the bladder and the ureters outside the vulva, and waterlogs the kidneys, how it displaces the rectum and anus and constricts them, and produces constriction and retention irritations and proctitis, sigmoiditis, colitis and damage to all points cephalad, it would go way beyond the limits of this paper.

Reconstruction of the Pelvic Floor

If we have not missed the point in impressing the importance of construction of the caudad portion of the abdominal wall, it will be easy to draw the conclusion that as important as childbirth is, it is worth while to make every possible effort to conclude the ordeal with the muscles and fascias still intact so as to avoid the primary impairment. More time, lack of haste, hot stupes, lubrication, full control of the head at the time of passage, full anesthesia in difficult cases, will be valuable

prophylactic measures. I am convinced from a study of cases that we pay too high a price in the damage done by oblique episiotomy. The knife passes far beyond episiotomy, and farther than any spontaneous tear. The levator ani is too thin to lend itself to good repair after deep transverse incision. Usually only that portion which lies beyond the incision remains for repair.

It will readily be seen that if the numerous injuries which constitute primary impairment are followed by the secondary impairment, resulting in further damage to the supporting structure and herniation, great damage to the superimposed abdominal viscera, such as the bladder, vagina, uterus and rectum, immediate repair is worthy of the highest consideration. To make such repairs as nearly safe and certain of result as possible, the delivery should begin and end through a vagina as clean as possible. An unaided, unmanipulated delivery may take place through a dirty vagina, but most deliveries may presume some manipulation of, or into the vagina, such as examinations, forceps, turning of head, pushing back the cord, dilating or cutting the cervix, version and/or repair of injuries.

For easy repair the patient should be in the lithotomy position with the buttocks extending over the end of the table. The opening made by the delivery, is not usually an adequate opening for repair. Frequently the injury to the muscle and fascia does not correspond in location to the skin vaginal wall injury. Frequently the muscles injured in or near the median line slip away to the side and cannot be seen or reached through the tear. The vaginal flap should be raised, irregularities trimmed, and the separated muscles and fascias exposed and brought together under sight. Any structure needing repair should be seen. This exposure is as important as in the repair of injured arm structures by a crushing injury. The separated and injured levatores should be brought together for a new and adequate insertion attachment—the origin of the muscles not usually having been disturbed. The muscles should be united far enough forward to cause the posterior vaginal wall to give a lift to the anterior or vaginal wall and of the greatest importance is the placing of posterior sutures far enough back to make the puborectalis fit snugly around the rectum, to which the muscle should be well attached.

In cases of median pelvic floor section with a lateral extension to the side of the rectum, an essential part of the repair is to sew the severed end of the levator to the anorectal wall and sphincter on the side involved. The pelvic floor restoration is made easily and effectually by a suture which picks up the muscle on the patient's left side, then the right, then about ⅜ to ½ inch farther forward, the left muscle and then the right, tying them across so as to form an *X* as shown in cuts illustrating the late repair. Ordinarily one suture is placed in front of this and one posteriorly. All of these take the full thickness, but not the full breadth of the muscle and its supporting fascias. The superficial layers of muscle and fascia are now closed above the levator repair.

If the tear went back far enough to involve the sphincter ani, the two ends of the sphincter should be brought together in front of the anorectal wall and sutured, and also sutured to this wall and levatores, some ⅝ inch from the skin edge to prevent the rectal wall from retracting. In the superficial closing the purse stringed rectal wall should have a few cat gut sutures attaching it to the posterior perineal angle. If the tear extended up the rectal wall, some form of repair must be made. Some prefer interrupted sutures with knots on the rectal side. Some recommend the knots on the wound side. I much prefer a purse string which brings the rectal wall down to the outlet, thus making the anterior rectal wall complete with no extension of infection from the rectum. I have never encountered a case where the damage of wall was so extensive as to prevent an easy mobilization. As a cleansing measure I much prefer douches in the aftercare. I can see no adequate compensation for allowing a pool of pus to collect in the vagina.

As desirable as is the immediate repair before the secondary impairments have developed, we must admit that the future well-being of the patient is not always favored by these efforts:

1. There is not always a skin or vaginal tear to indicate deeper injury.
2. These primary injuries are frequently in the hands of those having little training in pelvic floor surgery.
3. There has been and is a great tendency to let the accidental vulvovaginal tear do for the surgical opening for repair of deeper structures.
4. The oblique episiotomy does not lend itself to good repair and healing.

5. Even with the best of conditions, there is a higher percentage of non-healing than in gynecological surgery. This percentage is somewhat overestimated due to the fact that efforts at repair have often failed to reach the proper tissues.

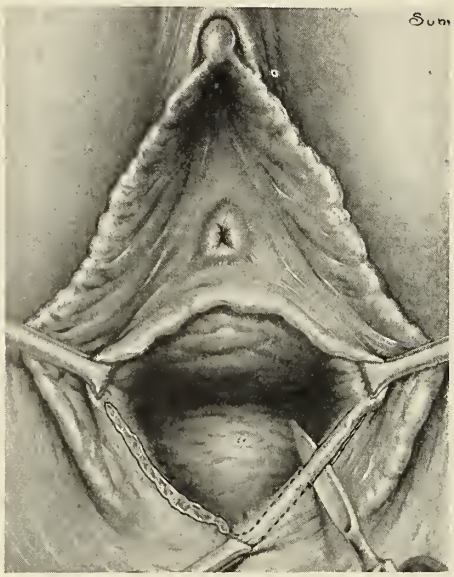


Fig. 1

As desirable as is immediate repair, for the above reasons and perhaps others, many of these patients come for late or gynecological consideration, when herniation has been added to primary injury, and so we have for our study and planning—

Late Reconstruction of the Pelvic Floor

So much have local tears grown into pelvic floor weaknesses and so much have the forces which develop hernias taken advantage of these primary weaknesses, that we now have not merely the original musculofascial injury, but even in mild cases we have cystocolpocele and rectocolpocele, which are known as hernial terms. We find the uterus following and approaching the pelvic floor, the first stage of which condition might well be called "prolapse" as it has not yet come through the abdominal wall, the pelvic floor, but is still a downward displacement only. In a medium case, the urethra and bladder and vaginal wall bulge through the anterior pelvic floor slit the size of a hen's egg or larger; the posterior vaginal wall and anterior rectal wall bulge through the same opening, showing as large a herniation or even larger than the anterior mass; the cervix uteri is showing through the opening and may easily be drawn outside. The pelvic floor muscles are found loosening from the rectum and it is taking a lower position, and the pelvic floor muscles are found far to the side. This is a marked herniation, but the patient may endure, partly because doctors who know little or nothing about this condition tell them there is nothing to be done. Frequently the patient is told "these muscles were torn years ago, they have atrophied, and there is nothing to do." I have heard this hundreds of times. A report of thirty-eight cases in one clinic was made in which "there was nothing to do but close up the vagina." I gave my answer and cannot repeat it here, but it was decidedly against such procedures.

In extreme cases, the uterus is outside. The anterior and posterior vaginal walls run downward from the vulva to the cervix; the bladder is felt on the anterior surface of the uterus, somewhat thickened and partially distended; the rectum is found posteriorly. Lieberthal has demonstrated the ureters coming out the pelvis, being sharply kinked and running back to enter the base of the bladder. Excoriations and necrosis are not uncommon and gangrene is possible from incarceration. These patients may not be so old but that the uterus may contain a foetus when extreme incarceration takes place, but usually they are older. They are stiff and show a certain posture and walk. Perhaps marked herniation of the rectum exists. Perhaps a grapefruit sized herniation of the rectum and a goose-egg sized rectocele alternate as to whether this rectal herniation is in or out.

We have gone into the picture considerably under the head of impairment; we are now recalling it in order to visualize it for treatment. We may have, even after many years, only a mild herniation which the key operation will suffice to correct and restore the normal relations and positions of the vagina and uterus. It is important to consider at this point the scar tissue that may have formed in the region around the trauma in the skin, vagina, around the front of the rectum, and reaching to the sides, especially in extensive tears and those that have been operated on, one to many times. Leaving this scar tissue will but contribute to another failure. All firm scar tissue should be removed, leaving normal, pliable elastic structure to be united. This will often require more definite dissection and exposure of muscle to be brought together.

The Key Operation

This is an important operation, as it is practically the basic procedure of pelvic floor repair. It is not a "perineorrhaphy" for this is a term meaning putting sutures in an open torn perineum, and had its beginning in a superficial placing of sutures in an obstetrical repair. What we really should have in mind in facing all degrees of herniation is a complicated piece of pelvic floor engineering, which not only restores the supporting structures, but also replaces all herniated structures within, or, if need be, removes pathologic or irreplaceable structures.

*Technique of Key Operation.**—The key operation is performed as follows, these needs varying according to conditions:

1. Tooth forceps grasp the hymen remains just posterior to the mouth of the duct of the gland of Bartholin, thus marking the place that will leave the right sized opening for the vagina (Fig. 1).

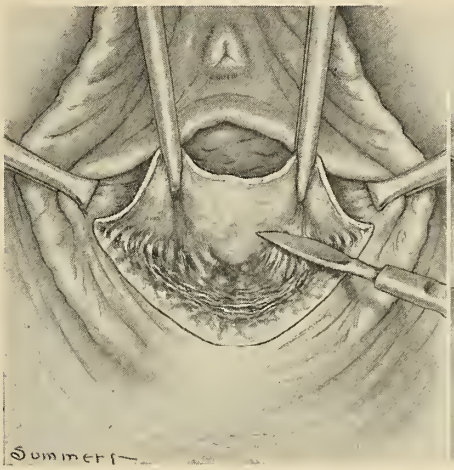


Fig. 2

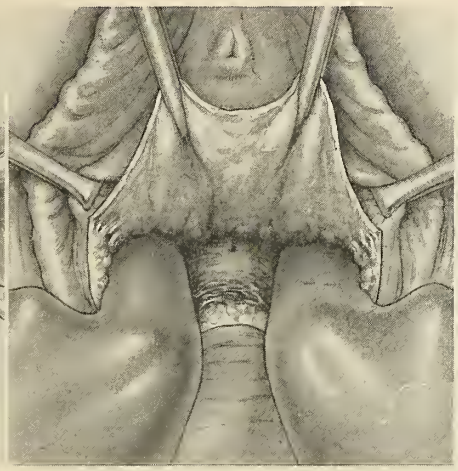


Fig. 3



Fig. 4

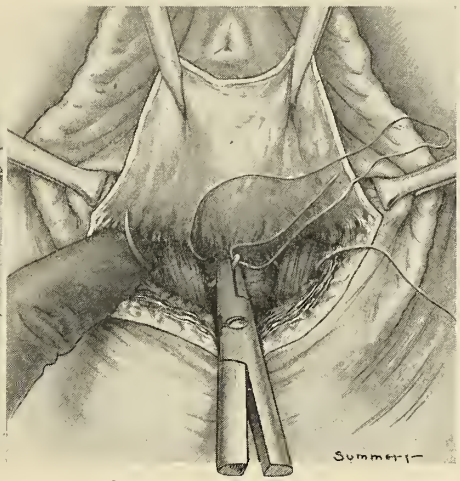


Fig. 5

We lay stress upon making the initial incision at the hymen vestibular junction, and not out on the labia.

2. With a sharp knife, the hymen remains are severed posterior to these forceps so that the vaginal edge is freed as above (Fig. 1).

3. The vaginal edge is picked up and lifted mostly by blunt dissection from the remains of muscle in the central tendon, and higher up from the anterior rectal wall. This opening has a depth of two-thirds of a finger's length and is well above the levatores, separated and lying well to the side (Figs. 2 and 3).

4. The left index finger is placed in the wound

*This was described in the American Journal of Obstetrics and Gynecology, 1909.

above the left levator muscle, while a strong curved needle is made to encircle the border including the fascia, muscle, and fascia. It then picks up rectal fascia and then repeats from above



Fig. 6

down through the right levator. The needle then picks up the left levator ⅜ to ½ inch farther forward and then the right (Figs. 4 and 5).

5. These muscles were wide apart, furnishing an opportunity for hernia (Fig. 6), but upon mild traction and tying of the crossing sutures, the muscles are approximated and we have the first step of a hernioplastic operation (Fig. 7).

6. Another suture is placed in front of this figure of 8 suture (Fig. 8). The finger in the vagina now tests the remaining size of the vaginal cleft and if this hernial cleft is still too large, another suture may be placed. A posterior suture catches the muscle well to the angle and then takes a bite of the rectal fascia, and then the opposite muscle well back so that the puborectalis muscle is made to grasp the rectum snugly, to which the suture attaches.

7. The excess of vaginal flap is cut away from the hymen forceps on one side to the other, and a purse string suture is run along this trimmed vaginal edge from one side to the other (Fig. 9).

8. A few interrupted silkworm sutures are placed to bring the superficial muscles and skin together (Fig. 10) leaving the vaginal opening, vestibule, suture line and rectum as seen in Figure 11.

This key operation varies somewhat according to the extent of the primary injury and the degree of rectocele, and other herniation, but the variations in the pelvic floor engineering consists more in the selection and carrying out the other measures to fit the individual case. This key operation is a substantial support but is only adequate when redundancy of bladder and vagina are taken care of. The vagina should have a normal direction from forward, upward and backward. The uterus, if proper engineering warrants its retention, should occupy a position at least at right angles to the vagina and in a horizontal fundus forward, cervix backward position. Whether or not this can be accomplished is a part of the engineering problem. If the uterus requires removal, this should precede the pelvic floor repair, as should also the work on the cystocolpocele.

There are also other factors to be considered. If the uterus is past the functioning age it may be removed on slighter pretext. It is much more difficult to save some uteri than to remove them. Then there arises the question of pathology. There are many pathologic conditions other than cancer that warrant the removal of an aged herniating uterus. Removal of the uterus does not solve the question of the vagina. A large, loose herniating vagina requires as much and somewhat the same care to attend to its ligaments as does the uterus when considered leavable. Sometimes a uterus of a non-functioning age is free enough from harm to be left. Sometimes an amputation of a heavy cervix contributes much to good behavior. Oftentimes the amputation is desirable even though the childbearing period is not over. By amputation the weight is lessened, disease is many times removed, and new fixation to surrounding tissue lessens its undesirable excursions.

Herniation of the bladder is lessened by upward and backward fixation of the cervix and upper end of the vagina, by the snug pelvic floor repair, but a hernioplastic operation on the anterior vaginal wall, and the suturing of the pubocervical fascia or ligaments, is often required to prevent the bladder redundancy shoving out over the pelvic floor.

By the key operation on the pelvic floor, by the correction of direction, size and position of the vagina, by the correction of position of the uterus or its removal, and by the hernioplastic operation

to hold up the bladder, we can very satisfactorily take care of the herniations through the anterior triangle. When these primary impairments break over into the posterior triangle, or when the secondary impairments to the pelvic floor lessen the attachments around the rectum, we have need of additional reconstruction, usually to be combined with the key operation.

If the primary or secondary impairments involved the pelvic floor attachments well back to the tip of the coccyx, we may have a herniation involving the whole caudal end of the abdominal wall with extensions of this large herniation through the anterior and posterior pelvic floor clefts.

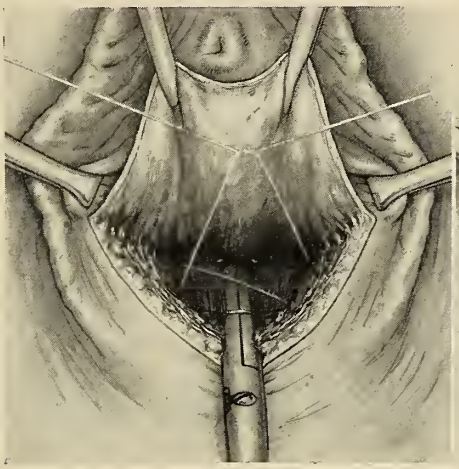


Fig. 7

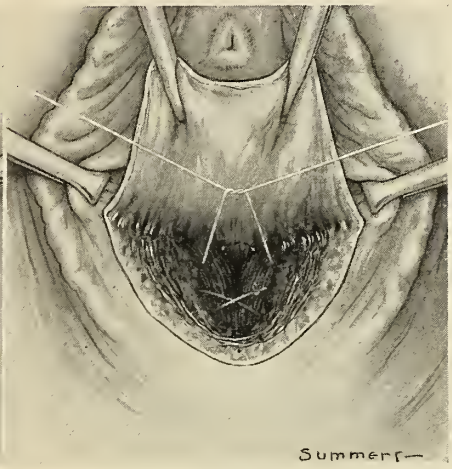


Fig. 8

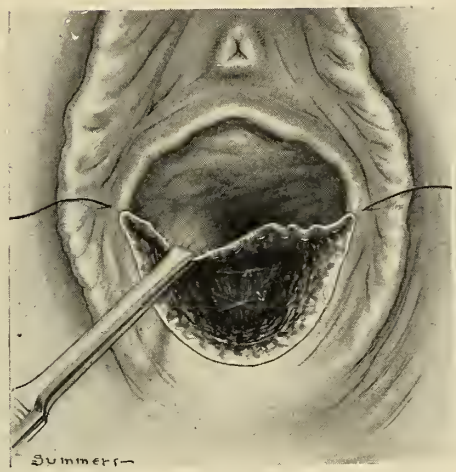


Fig. 9

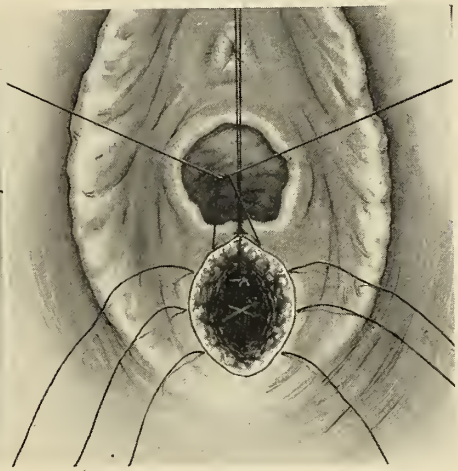


Fig. 10

Reconstruction in the Posterior Triangle

This is usually in addition to the work done in the anterior triangle, but the muscles may lose attachment to the rectum and even extensive herniations take place, in cases with little or no impairment in the anterior triangle, as in rectal herniations in nullipera and in males.

First, we may consider tears in which the sphincter is torn. Usually the sphincter is found to extend only around the posterior half of the anal opening with dimples, one on each side, marking the termination of the sphincter. In late reconstruction of tears which have invaded the posterior triangle and rectum—

1. The removal of all scar tissue
2. The separation of vaginal from the rectal flap deep enough to reach the retracted pelvic floor muscles
3. Special dealing with incomplete rectal wall after the rectovaginal wall has been split
4. Recovering the sphincter ends and bringing them together in front of the mobilized anterior rectal wall

5. Suturing the puborectalis and pubococcygeus far enough back so that they encircle the rectum snugly and attach to the loosened structures to each other.



Fig. 11

We have already considered No. 1 under the key operation, but it assumes a double importance here because of the more extensive tears, and the possibility of one to many previous efforts at repair. Sometimes these previous efforts have built up some scar tissue between the rectum and vagina, but have not brought the sphincter ends together, hence the patient continues to suffer from rectal incontinence.

Some inexperienced operators fear the removal of too much normal tissue by removal of scar tissue and a large dead mass of scar tissue is interposed.

The vaginal edge and rectal edge should be relieved of any irregularities and scar edges which are almost invariably present and render such flap operations as the Ristine procedure pathological.

In considering No. 2 we would emphasize the importance of a muscle-to-muscle repair, not only for support but so that the puborectalis may assume its function as an accessory sphincter muscle. The tightening of this muscle is exaggerated if for any reason, such as multiple operations or for other reasons, the action of the sphincter ani seems likely to be weak or absent. In such cases the puborectalis makes a very respectable substitute, perhaps not quite 100 per cent efficient in diarrhoeal bowel contents, when an enema may rid the bowel of troublesome contents.

In dealing with No. 3 we amplify by calling attention to the fact that sutures to close the anterior rectal wall defect, either with knots tied in the rectum or in perineal opening, results in possible leakage, infection, destruction of tissue, and either complete breakdown or in a rectoperineal or rectal vaginal fistula. Sometimes a fistula has resulted from the original tear having healed near the outlet or at some point up the course of the tear, but failing to heal in the part above. Sometimes the fistula results by reason of non-success of a primary repair. Usually the isthmus or perhaps the considerable body of tissue below the fistula looks so important as to make it appear advisable to try to close the fistula, but we have found that the matter is simplified by cutting away the tissue up to the fistula, making the fistulous opening a part of the V-shaped defect.

V-shaped defects, instead of being dealt with by suturing, are best dealt with by a purse string suture which brings the incomplete rectal wall down to the outlet as in the immediate repair, which leaves the anterior rectal wall complete and free from rectal leakage and infection. Occasionally a small or even larger fistula may lie so high as to warrant separate closure.

Under No. 4 we would stress the importance of exposure of the muscle ends so that the sphincter may be made complete in encircling the rectum end.

In the suturing of No. 5 after dealing with rectum and in the described key operation, it may be claimed that more pelvic floor structure is brought together than is normal. We cannot claim to duplicate the fine construction and interweaving of the fascias and muscle fibre which normally hold the pelvic floor muscles together with the minimum of structure and so the muscle union is exaggerated, but any stiffness and grossness of this structure is apt to be due to the unremoved scar tissue.

Patients with perineal repairs, even including the rectal repairs, may be considered fit for childbirth through the normal route, with few exceptions. There have been a few cases with great destruction of tissue, numerous operations, up as high as nine, ten, twelve and fourteen, after getting a serviceable and satisfactory repair, in which a Cesarean section is to be greatly preferred.

The average case, however, may have a vaginal delivery with a median separation of the muscles with immediate operative repair. Such a case should have surgical preparation of the vagina and external genitals with surgical conduct of the case, with surgical aftercare as befits an area subject to possible infection from the vaginia and rectum. After years of experience I am not sympathetic to a pool of pus in the vagina, in obstetrical or surgical cases, as will be the case if douches are omitted. In some clinics douches are forbidden, and in others the nursing force is so prejudiced as to lead to nearly the same result.

Herniations of the Posterior Triangle

We come now to those impairments of the posterior triangle. The divisions of the caudal end of the abdominal wall into two triangles is no doubt due to one being occupied by the genital terminals and the other by the alimentary tract terminals. The one is studied by the gynecologist, the other occupies the thought of the proctologist, and they have been dealt with as though they were two separate structures, but a little more thought brings out the observation that the caudal wall in the human occupies a low position and the support for one structure is the support for the other, and that impairment to the insertion in the pelvic floor muscles affects the support in both structures. The impairments to support in the anterior structure tend primarily or secondarily to cause lack of support to the rectum. Again, if we try to divide the conditions according to tracts, we have rectocolpocele, one of the most common of the pelvic floor herniations that inseparably involve both tracts. Again, pelvic floor tears extending into the rectum complicate the two tracts so that they present an inseparable interest.

We have herniations resulting from descent of the posterior peritoneum which Moscowitz insisted was a hernia, but dealt with under supposition of its being a prolapse. C. Mayo speaks of general protrusion as in reality a herniation, but deals with it under the head of prolapse. Montgomery and Jeff Miller have made noteworthy efforts to recognize the hernial nature, but mixed their efforts with too much prolapse.

The cul-de-sac may or may not end up as part of rectal herniation. It may come low and not point at all, or it may bulge toward the vagina or it may bulge toward the rectum. It may push the rectal wall down to emerge with the anal opening, when it becomes a herniation, or it may bulge through the pelvic floor at the perineum, and become a perineal herniation, or bulge into the vagina and then with the vagina pass through the pelvic floor. A process of peritoneum may find its way through some defect in the levator muscle and proceed downward and protrude posteriar to the rectum at some point in front of the coccyx.

We are not now speaking of those rare hernias seldom seen, but rather of the very common condition of rectal herniation meaning rectal protrusion throughout the posterior cleft through the caudal wall of the abdomen. These together with the protrusions of the genital structures through the anterior cleft are usually erroneously called prolapses. In the author's article entitled "Hernias Through the Pelvic Floor," *American Journal of Obstetrics* 1909, these were definitely demonstrated as hernias. I have never seen this denied, but the habit is strong so that many now do some form of hernioplastic operation for so-called prolapse of the uterus. Rectal surgery has not been so fortunate. These protrusions are called prolapse and dealt with as prolapse, the hernial feature receiving almost no attention. Cuneo and Sénéque have proposed an external operation for taking the slack out of the sphincter and levatores through an anterior or posterior incision. A perineorrhaphy for enlarged pelvic floor cleft in the male was suggested in the 1909 publication and performed numerous times through a U-shaped incision posteriorly. Allen's case was a noteworthy example of a complicated condition of herniosis, called a herniation and dealt with as such. We should not lose sight of the fact that many men do a commendable repair under a diagnosis of "prolapse" and "relaxation of the outlet," but here logic takes a vacation.

Reconstruction of Pelvic Floor in Rectal Herniations

As these conditions are incited by injury or loosening of the pelvic floor, allowing the rectum to slide through, the mass playing back and forth through the opening enlarges the opening still more. The bowel thereby is allowed to herniate still further. The amount herniated may be a considerable mucous membrane, or a mass or ring of hemorrhoidal tissue, or an inch of the bowel wall or more up to several feet may herniate. It results in edema and swelling and infil-

tration, which may cause any of these to be strangulated or the circulation to be cut off. The herniation may go on rapidly or slowly until the bowel may be herniated 1 foot, 2 feet, 8 feet or 10 feet, although this latter condition would be rare. The mass might be long and only moderately increased in size, or it may be short and thick, more like a muskmelon. The tissue may be in fairly good condition in the small herniations, but in a marked condition of degeneration in the larger ones, due to strangulation. The opening through the sphincter and that through the pelvic floor may vary from 1.5 or 2 inches in diameter, up to a size which readily admits a fist, and in rare cases the hernial ring is about equal in size to the bony outlet. The finding of this enlargement of the rings with visceral protrusion through, establishes the diagnosis of hernia beyond the question of a doubt, and as such to call the condition by the improper and belittling term of prolapse leads to the undertaking of some procedure upon the bowel, with nothing done to correct the hernial opening.

While these conditions occur in men, and in women who have not borne children, we have noted a marked interrelation between rectal herniation and genital herniation. Injury to the pelvic floor injures rectal support. The same muscle weakness is involved in both herniations. Rectocele is a great factor in loosening the rectum until with some unusual lift or strain the rectum is driven through the weakened enlarged opening. Rest in bed, replacement and retention might do something. I would lay great stress upon trying to keep the mass inside for a while, in order to improve the tissue for a radical operation, in the severe cases. If the rectal herniation exists alone it is a point greatly in favor of success in operation. If the mass is small or moderate it is a favorable point. If the tissue is in a healthy condition, a favorable outcome may be expected. In extensive herniation, with tissues in bad condition, even after efforts to improve them, the work may be done on the rectum, with the genital and bladder repair reserved for another sitting.

The Intra-Sphincterian Hernioplastic Repair

1. A sharp knife encircles the protruding bowel at skin anal junction just inside sphincter ani, and the gut is turned down over the inside portion. If the herniation is somewhat extensive, the mesentery should be tied posteriorly to control hemorrhage.

2. The sphincter ani is now retracted forward by a narrow retractor while the bowel is drawn backward and the levatores are exposed on each side, and two to four cat gut sutures are placed to bring the levatores together. The bowel is now drawn forward and the sphincter is retracted backward, while two to four sutures are made to pick up the pelvic floor pillars as in front.

3. Sutures now pick up the front angle of the skin ring, and sphincter ring and the pelvic floor muscles, then the reverse order on the right side. Two or three of these sutures are used to reduce the sphincter and skin opening. Now the bowel is drawn forward and two or three sutures are placed posteriorly to reduce the size, as in front.

4. The levator muscles are attached to the side of the bowel. The bowel is now cut off the proper length and the skin and sphincter is attached to the bowel end, leaving the sphincter and skin opening much reduced and of a size for the anal opening. The sphincter ani is now much assisted by the snug pelvic floor structure.

A small wick drain may be inserted anteriorly and posteriorly. We are of the opinion that a good sprinkling of sulfathiazole is helpful and will be used by many. Penicillin is to be recommended in bad cases and blood transfusions may be necessary.

Anterior herniation will not infrequently be associated, and it remains a problem of pelvic floor engineering to say whether the repair of these anterior impairments should receive attention at the same time or later, depending upon the extent of the operation, and the condition of the tissues and the condition of the patient. I believe it would be justifiable at times, with bad condition of tissues, to cut the herniation away, leaving the bowel a little long, and after attaching it to the skin with a suture tied loosely on each side, leave the hernioplastic operation for a later date. In that case a generous sprinkling of sulfa drugs will be justified, we think.

Even this lengthy article leaves much to be said. We have aimed to keep away from the skin mucous membrane, perineal body, posterior colporrhaphy, intra-abdominal, atmospheric pressure, prolapse myths, and present the subject on the basis of its construction and pathology.

In a pelvic floor injury, resulting urethrocele,

cystocele, rectocele, colpocele, metrocele, proctocele, anocele, enterocele, etc., all hernial terms, it seems wise to substitute the term HERNIOSIS or CELEOSIS instead of the inaccurate terms of prolapse and procidentia, as prolapse, descensus, ptosis, refer to downward displacement in the abdomen, but have no reference to the abdomial wall; herniation, hernia, breach, rupture and cele refer to abdominal wall injury with protrusion of abdominal viscera into or through the injured abdominal wall. The term herniosis and celeosis refers to the general protrusion of different structures in this region. These protrusions are hernias only when they have passed the musculofascial openings and only then are they entitled to the suffix "cele" which signifies hernia. The time is past when one can diagnose these conditions as "prolapse of the uterus" and "a relaxed or broken-down outlet." It is distinctly an injured caudal wall with a multiple herniation or herniosis, and on that basis only can we do a twentieth century restoration to function.

We have stressed the hernial nature of all protrusions of pelvic and abdominal viscera through the pelvic floor and have done so in our clinics and in writing for many years.

1. The construction of the pelvic floor constitutes a distinct closure for the caudad end of the abdomen until impairments take place.

2. Childbirth impairments furnish an opening for secondary impairments and hernial developments.

3. Reconstruction of the pelvic floor constitutes a widely diversified hernioplastic operation, sometimes calling for the key operation, and frequently one or more accessory operations, such as anterior hernioplastic repair of vagina and fascia, amputation of cervix, ligament operations upon the uterus, sometimes hysterectomy, ano-rectal reconstruction, sphincter repair, hernioplastic operation for rectal herniation and hemorrhoidal herniation.

4. A consideration of the construction of the pelvic floor, of impairment, primary and secondary, of developing herniation, of the necessary steps for effectual repair and carrying out of such reconstruction is nothing short of scientific pelvic floor engineering.

5. It is important in essaying this kind of reconstruction work to be able to visualize—

(Continued on Page 933)

Interpretation of Serologic Reports for Syphilis

With Special Reference to False Positive Reactions

By Venereal Disease Control Committee Michigan State Medical Society

THE PROBLEM of false positive serologic tests for syphilis is a very serious one. The more this problem is investigated the more confusing it becomes. This is especially true with asymptomatic or latent syphilis in which the diagnosis must rest almost entirely on such serologic evidence. Absence of a history of syphilis in such patients means little since experience shows that no history indicating time of infection[2] can be obtained in two-thirds of such women and one-third of the men. A diagnosis of latent syphilis must be accepted on serologic evidence alone in many cases.

False positive serologic tests for syphilis were considered rare in the past except in a few diseases such as yaws, leprosy and possibly malaria. Experience with draftees, military separatees, marriage certifications, blood bank testing, et cetera, is emphasizing the fact that such false positive reactions are rather common, particularly with precipitation or flocculation tests (Kahn, Klein, Eagle, Mazzini, et cetera).

Experience in the Social Hygiene Clinic of the Detroit Department of Health has revealed the following interesting statistics on probable incidence of false positive reactions. Draftees rejected for military service in Detroit during the first year of our recent World War because of two successive positive serologic tests for syphilis were referred to this clinic for further disposition. There was usually a lapse of three to twelve weeks between rejection and being contacted for interview. Of such cases not referred to private physicians for diagnosis and possible treatment but examined in this clinic, eight per cent proved to be negative for syphilis, both clinically and serologically under follow-up examinations. In other words, eight per cent of such cases must have had only temporary seropositivity due to some intercurrent condition other than syphilis.

Prepared by Loren W. Shaffer, M.D., Chairman, Venereal Disease Control Committee of the Michigan State Medical Society. Reprints of this article may be obtained from the Michigan Department of Health, Dewitt Road, Lansing, Michigan.

An even more illuminating and possibly alarming situation has developed in military separatees. One hundred and fifty of such separatees, mainly from the Southwest Pacific theater, were selected for study. These cases had a doubtful to strongly positive serologic test at the time of their release but denied any history of syphilis or treatment for same. Many claimed that previous serologic tests had been negative. A history of malaria was given in many cases but in others no history could be obtained of any infection or condition recognized as a common cause of false positive serologic reactions. In this group, of 150 selected cases, 43 per cent proved to be entirely negative both clinically and serologically (Standard Kahn and Quantitative Kahn) and were placed on further follow-up with no positive findings to date. Forty per cent of this group have fluctuating weak positive titres to both Kahn diagnostic and quantitative tests and are being carried under further observation. The majority probably represent nonspecific reactions. Others represent treated cases but history denied, or partially burned out late latent or congenital syphilis. It is hoped that under further observation the serologic trends, spinal fluid findings or further history will establish either a positive or negative diagnosis. A positive diagnosis of syphilis has been made in only 17 per cent of these 150 selected cases. *It is recommended that such a conservative attitude to the serodiagnosis of syphilis be more generally followed.*

The list of diseases recognized as causing false positive serologic tests for syphilis is being constantly augmented. Some of the recent additions are vaccination, serums, infectious mononucleous virus pharyngitis and bronchitis, undulant fever, chancroid and lymphogranuloma venereum. In addition certain individuals have persistent false positive reactions usually of low fluctuating titre which may persist throughout life. Lower mammals, such as the ox, horse and sheep show consistently positive serologic reactions for syphilis. Kahn[1] explains false positive reactions as a biologic transfer to man of this tendency. It is suspected that such biologic or false positivity may occasionally be present in rather high titre. The titre may be stimulated or increased by any of the growing list of conditions already mentioned. *Fortunately, such increased titres usually reverse to negative in three to twelve weeks after the provoking factor is eradicated.*

Comparative serologic evaluation studies show that in general the more sensitive the test the less specific it becomes for syphilis. The desire to increase sensitivity to a point where a positive reaction will be secured in practically all cases of syphilis leads to an increasing number of positive reactions in nonsyphilitic individuals. It is the opinion of this committee that this is especially true of precipitation tests.

Intensive investigations are being made to develop a test or antigen that will be specific for syphilis. Kahn[2] has developed his "verification test." Pangborn[3] has developed a phospho-lipid antigen from beef heart (cardio-lipin) which it is hoped will prove much more specific. Spirochaetal antigens have promise and investigation of the globulin and lipoid fractions in human serum with which positive reactions may be linked are promising. A generally accepted method of differentiation between false positive and specific reactions is not available at the present time. Until that date the following recommendations are made for the guidance of physicians faced with the problem of serologic interpretation.

1. A general weakness of physicians is a tendency to depend entirely upon the laboratory for the diagnosis of latent and late syphilis and to neglect a detailed physical examination for any clinical evidence of the disease. This should include complete examination of the stripped patient for any evidence of genital and mucous membrane lesions, rashes, reflexes, scars, bone changes, stigmata of congenital syphilis, a careful cardiovascular check and a spinal fluid examination.

2. A failure to get a detailed history of the patient and his family is also a common error. This should include any previous history of blood tests, venereal disease, any treatment or suggestive treatment, and history of syphilis in the family or of previous marriages. Inquiry should be made as to recent illnesses, vaccination, et cetera, that may have caused a false positive reaction.

3. A single test, no matter how strongly positive, should not be considered diagnostic in the absence of clinical confirmation or history of syphilis. At least repeat the test. An error may have occurred.

4. Weak positive or presumptive or exclusion tests, even when repeated should not be considered diagnostic of syphilis in the absence of clinical findings or history.

5. Spinal fluid examinations should be more extensively utilized in making a decision as to the

interpretation of questionable serologic tests. A positive spinal fluid report will solve the problem of interpreting such a questionable test.

6. When a false positive reaction is suspected get both a complement fixation and a precipitation test. The laboratory of the State Health Department is prepared to do and report both tests on specimens designated for diagnosis. If the two tests are not confirmatory, suspect a false positive reaction.

7. Quantitative (determining the degree of dilution required before a positive reaction disappears or becomes negative) precipitation and complement fixation tests are desirable in such questionable cases. A progressively dropping titre suggests a false positive reaction. A fixed or increasing titre suggests syphilis.

8. Blood serum from questionable cases may be sent to Serological Laboratories of the University Hospital, Ann Arbor, Michigan for a "verification test." A report of a biologic false positive reaction may strengthen the backbone of both physician and patient to follow a further observation policy.

9. It is essential that serological tests be secured in all cases intensively treated with arsenic, penicillin or both. It requires one to six or more months for serologic reversal. Meanwhile, the only way serologic progress can be satisfactorily followed is by quantitative tests. Observation only is indicated as long as the titre is dropping progressively and the patient remains clinically negative. A serologic relapse as a warning of clinical relapse can only be detected through a quantitative test, if it should occur before the standard blood test becomes negative. Quantitative tests may be secured through the laboratory of the State Health Department on request.

10. In a patient with no history or clinical signs of syphilis (including spinal fluid) there can be little harm in waiting a year or longer to reach a decision if in doubt as to the presence or absence of syphilis. Once treatment is begun there can be no recourse but to accept the diagnosis and follow the patient as a syphilitic for life.

11. We know of no short cut to an immediate decision in questionable cases except to establish serologic trends through prolonged observation. This is unfortunate particularly where prompt marriage certification is desired.

12. While this paper deals primarily with interpretation of serologic reports in relation to false positivity, a word of warning should be given in relation to the interpretation of negative tests and serological fastness.

(a) A negative test does not eliminate the possibility of syphilis, particularly in late cases. Accept characteristic clinical findings as diagnostic in late syphilis in spite of serologic results, and give the patient at least the benefit of a therapeutic test. It has been commonly stated that far more cases of syphilis are missed because of negative serologic tests than are mistakenly diagnosed as syphilis on a basis of false positive tests.

(b) In early syphilis reversals of serologic tests with older methods of treatment (arsenic and bismuth) to negative should not be accepted as evidence of cure Such cases should receive the amount of treatment that experience indicates is required to cure, regardless of serologic status (40 arsenicals and 40 bismuths on a continuous alternating schedule as recommended in 1941 by the Michigan State Venereal Disease Committee). Otherwise relapse is the rule.

(c) The converse of (b) applies to serologic fastness. A patient with a persistently positive serologic test after adequate treatment (30 arsenicals and 60 bismuths as recommended in 1941 for the late latent luetic by the Michigan State Venereal Disease Committee) should be carried under observation only, provided the spinal fluid is negative and no clinical evidence of activity exists.

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Syphilis and Penicillin Therapy

By Venereal Disease Control Committee
Michigan State Medical Society

Since the original studies by Mahoney and his associates[6] there is adequate proof that penicillin regularly administered in adequate amounts over a long enough period of time will cure a large proportion of patients who have acute syphilis.[7,8,10,11,15] Its use in syphilis and pregnancy and syphilis in the newborn seems just as effective.[3,4,12] In central nervous system syphilis, most authorities agree that to date the clinical course and spinal fluid changes, following its use, compare favorably with those found after therapeutic fever.[1,2,9,13,14,17,18]

The advantages of penicillin therapy in syphilis consist of its relative ease of administration, nontoxicity, and rapid spirochaetocidal effect. Most courses of therapy are completed in seven and one-half to fifteen days. The reactions, incident to its use, are minor and in 14,000 cases treated in the U. S. Army by Pillsbury[10,11] only one patient did not complete his course because of drug reactions. The fact that almost all patients who begin such therapy complete the full course is an exceptionally important factor in the management of an acute, infectious disease such as syphilis. Toxicity varies from mild Herxheimer reactions, consisting of fever, accentuation of lesions present or urticaria, angio-neurotic edema and exfoliative dermatitis. Most are mild and seldom need worry the physician who is responsible for the treatment.

Spirochaetes disappear from the lesions in a matter of hours[1] and in most patients lesions are healed by the time the treatment is completed.

Treatment Plans

There still is no agreement on the problem of optimum time dosage relationship in the treatment of any of the types of syphilis. Penicillin alone, combined with arsenic, bismuth, arsenic and bismuth, and fever are being used. Other salts than sodium penicillin are likewise being given, as well as more slowly absorbed compounds such as penicillin in peanut oil and beeswax. Most reported studies in acute syphilis consist of the administration of penicillin by the following plans:

1. 40,000 units of penicillin given every 3 hours for 60 doses. The total amount received is 2,400,000 units.

2. 40,000 units of penicillin given every 3 hours for 120 doses. The total amount received is 4,800,000 units.

3. 20,000 units of penicillin given every 3 hours for 60 doses, plus 40 mg. of oxyphenarsine hydrochloride given daily for 8 doses.

4. 20,000 units of penicillin given every 3 hours for 60 doses, plus 40 mg. of oxyphensarine hydrochloride given the first, third, fifth, seventh, and ninth day, and 0.2 gm. of bismuth salicylate in oil the first, fourth, and eighth day.

5. 20,000 units of penicillin given every 3 hours for 60 doses, plus 0.2 gm. of bismuth subsalicylate given the first, third, fifth, seventh, and ninth day.

The comparative value of these several systems of treatment must be determined in the future, and many other plans both initiated and tried before the final answer is known. It would not be premature to say that all are effective and the actual differences are minor, except that any schedule incorporating arsenic is more toxic than one with bismuth. Penicillin alone is the least harmful of any. Any schedule used must be given as regularly as possible to obtain the greatest effectiveness, and the maximum time between doses of sodium or calcium penicillin must be no longer than 3 hours.

The results of such treatment can only be measured by the healing of the lesions, by the fall of the quantitative serological test to negativity and by its subsidence there. Reinfectivity is also proof of cure if super infection is denied. The problem of relapse versus reinfection is now a major one because there is ample evidence that penicillin biologically cures patients with early syphilis. As a result, that which is thought to be a relapse may be instead reinfection.[15]

TABLE I

	Total Cases	Per Cent Relapse—6 mos.
Primary Sero-Positive	274	1.8
Primary Sero-Negative	271	12.2
Secondary	111	27.9

Relapse

Available figures show the relapse rate to be in proportion to the age of syphilis. Table I from Pillsbury[11] using schedule I is illustrative.

Prepared by Arthur C. Curtis, M.D., Professor, Dermatology and Syphilology, Medical School, University of Michigan.
Reprints of this article may be obtained from the Michigan Department of Health, Dewitt Road, Lansing, Michigan.

Although some members of this group may well be reinfection, the trend of relapses show how important it is to diagnose and treat syphilis as early as possible.

Relapse may occur early or late, but most relapses appear either as serological or clinical ones during the first six months after treatment. Table II from Pillsbury[11] is illustrative of relapse incidence. If no signs of relapse appear during the first year, it is reasonable to assume that relapse will be unlikely thereafter.

TABLE II RELAPSE OR REINFECTION

Weeks	No. Cases
0- 4	6
4- 8	13
8-12	14
12-16	16
16-20	10
20-24	3
24-28	3
32	1
45	2
Total	68

Results in Acute Syphilis

The per cent of serological cure of penicillin-treated cases at the end of six months, using schedule I is shown in Table III. It is again apparent that the earlier the disease is diagnosed and treatment completed, the much better are the results. Other schedules may cause these figures to vary in each group, but as yet no schedule is ideal.

TABLE III
(From Pillsbury[11])

Type of Syphilis		Per Cent Negative S.T.S. at 6 Mos.
Primary Sero-Negative	656 Cases	98.2
Primary Sero-Positive		87.8
Secondary		72.1

Follow-Up by Serological Tests

The introduction of quantitative serological tests has been of great value in following the course of patients after rapid therapy. Such tests give an accurate yardstick in telling whether the serological course is progressing as expected or whether relapse is evident. By the use of such tests many relapsing patients can be diagnosed as such during the serological phase and re-treated. This may often prevent the appearance of infectious lesions and dissemination of the infection to others. Any patient treated during the acute stages of syphilis should have quantitative serological tests done at monthly intervals for the first year. If sero-negative at the end of that time, serological tests should be done at intervals of two or three months for the next year. The clinical course of a patient, followed by such tests, is shown in Table IV.

TABLE IV
(Mahoney[5])

Days	Diagnostic Flocculation Mazzini	Diagnostic Flocculation Kahn	Complement Fixation Kolmer
0	44421	4442	444441
1	44421	4442	444443
9	44442	44441	44442
23	432	441	4443
30	4442	4431	4442
37	4421	41	332
44	432	4±	443
51	42	1	4441
58	43	1	—
65	21	—	—
72	21	—	—
80	2±	—	—
86	2	—	—
93	1	—	—

The fall to sero-negativity takes place first in the complement fixation test, which is the least sensitive, and last in the Mazzini, which is the most sensitive. The slow progress in all tests to sero-negativity, after three months, is evidence of a probable favorable outcome, but relapse can and does occur after a long period of sero-negativity. In acute syphillis, quantitative serological patterns usually regress or progress as follows: Low or high quantitative serological tests may rapidly fall to negative and remain there. Another type of serological pattern is seen where the test becomes negative, then after an interval of one or two months again becomes positive. This may mean relapse or reinfection, but in any case, more treatment is indicated. At times patients are seen who have a fall in the titre of the serological test, which is prolonged. If these patient's tests are followed, they may eventually revert to negative, or increase in titre, manifesting re-activation of their infection. More rarely one sees a patient whose serological pattern changes little with the form of therapy used.

Re-treatment

In any case needing re-treatment, the unit dosage level of penicillin and time interval should be the same, but the number of doses and amount of penicillin should be twice as much. If schedule I is used, the treatment scheme would be 40,000 units of penicillin, given every three hours for 120 doses. The total amount received would be 4,800,000 units. *All patients who have been treated for acute syphilis and who have not reached sero-negativity within a year should have a spinal fluid examination.* Probably, a minimum effective treatment schedule for central nervous system syphilis is similar to treatment plan I, except that the penicillin should be given for at least 100 doses.

Syphilis Complicated by Pregnancy

Syphilis complicated by pregnancy can be adequately treated by penicillin alone in the 2,400,000 unit dosage as outlined above.[3,4,12] Here, as in any antisyphilitic therapy in pregnancy, treatment should be instituted as early as possible and the patient followed monthly by quantitative serological tests.

In the group of early pregnancies where treatment was completed and delivery and adequate follow-up of the children reported, the results are better than with our older type of therapy utilizing arsenic and bismuth.[3,4,12]

In women treated while they are pregnant the observation must of course be stringent. Here one might be justified in re-treating without prolonged observation if the serological titre should rise. As long as there is a falling titre or if it has fallen to negative and remains there, there is no need to give further therapy.

The infant born of a mother treated during pregnancy should have a quantitative serological blood test done soon after birth. If the serological test is positive, it should be rechecked at two-week intervals for eight weeks. If the child does not have syphilis, the serological test will become negative during this time and remain so. If, during this period, the serological titre rises steadily, or the child develops syphilitic lesions, a diagnosis of congenital syphilis is justified and treatment should be instituted. If the serological test is negative at birth and there are no clinical signs of syphilis, the blood test need not be rechecked for one month, and if again negative, it should then be rechecked at monthly intervals for three months. If at any time in this period a positive test is obtained, more frequent testing should be done. X-ray studies of the long bones is also of much assistance in establishing a diagnosis.

In infants treated for congenital syphilis, the same follow-up routine as suggested for early syphilis should be utilized.

Syphilis of the Newborn

Penicillin therapy offers an ideal form of the therapy for use in the treatment of syphilis of the newborn, especially in the very small infants where the intravenous route of medication is difficult.[7,8,9]

Here dosage should vary according to weight and although smaller amounts may be adequate, it now appears that penicillin should be administered on a basis of 40,000 units per pound of body weight for the total course of treatment with a minimum of 600,000 units being given. Thus any infant weighing under fifteen pounds would receive 600,000 units, and could be given 10,000 units every three hours for 60 injections.

In very small, cachectic infants, prematures, and those with marked syphilitic involvement, the dose for the first day should be reduced, even to the point of giving only 200 or 500 units at each injection. This deficiency may be made up by portioning the extra amount among the later injections. A severe Herxheimer reaction in these infants may be such as to cause death, and it can largely be avoided by reducing the penicillin content of the first several injections.

Latent Syphilis

Little can be said of penicillin in the treatment of latent syphilis at the present time. Penicillin therapy appears to have merit, and is being tried. It is still too early to draw any conclusions and for the time being its use should remain on an experimental basis. Until more information on its evaluation is available, it is recommended that routine arsenic and bismuth therapy be used in the treatment of latent syphilis.

Syphilis Masked by Previous Penicillin Therapy

In the treatment of gonorrhea relatively small unitage and few injections of penicillin are given. These may delay or entirely mask the later appearance of a primary lesion or secondary eruption of syphilis obtained at the time the patient was injected with the gonococcus.

Patients treated for gonorrhea should always be suspected of having obtained a syphilitic infection at the same time. Monthly checkup examinations for atypical primary or secondary lesions and monthly serological tests for six months should be demanded of all such patients.

Summary

Although we still do not know the optimum dosage, time interval between doses, or total dose of penicillin to achieve the best results in the treatment of early, prenatal, or central nervous system syphilis, its low toxicity, ease of administration, and therapeutic effectiveness warrant its place at the top of any therapeutic program.

Penicillin should be given in early sphilis in amounts of at least 2.4 million units in seven and one-half days and the time interval between injec-

tions should be no longer than three hours, around the clock. This makes hospitalization of such patients mandatory.

Combinations of penicillin and oxyphenarsine hydrochloride, bismuth, or both may be better than penicillin alone in early syphilis, but the evidence is not yet available that this is true.

In central nervous system syphilis, penicillin should be given in amounts of at least four million units in twelve and one-half days. Repeated courses of the same amount may be necessary.

The use of delayed absorption techniques utilizing large single doses of penicillin in mixtures such as calcium penicillin in peanut oil and beeswax have not as yet been evaluated. Until such time as the value of such substances in various treatment schedules is determined, they are not recommended.

No better expression was ever coined than Stokes' statement that "from A.D. 1943, it will take a year to guess, two years to intimate, five years to indicate, and a decade or more to know what penicillin does in syphilis."[16]

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The Possibilites of Cure in Far-Advanced Cancer

Case Reports: "Curative" Operations Upon Far-Advanced Growths; Cancer Still Localized at Necropsy

By Harry C. Saltzstein, M.D., John O. Rao, M.D., and Jerome A. Yared, M.D.
Detroit, Michigan



THE HORIZON for operative removal of abdominal malignancy has widened. "Within the past ten to fifteen years, transfusion, anesthesia improvement, chemical and electrolyte equilibrium, protein and vitamin nutrition, and chemotherapy have so reduced operative and postoperative catastrophies that a vastly increased scope of operative removal of malignant growths is now possible." All this places an increased responsibility upon those undertaking the treatment of cancer.

Extensive far-advanced growths must now be re-evaluated in the light of the increased opportunities which the above discoveries have made available to us.

Brunschwig[3] has just reported 100 resections for far-advanced cancer. Although thirty-four died within four weeks, ten are now living for an average time of four years after operation. The cases are extremely far advanced and the procedures very extensive—such as resection of the left lobe of the liver en masse; wide removal of growths which already have fixation and extension to the pancreas, duodenum, spleen, and adrenal. Extensive mesenteric deposits are no contra-indications to removal. His only limitations are: "widespread peritoneal metastases, extensive hepatic metastases, and inability to encompass the growths by the incisions for resection."

His conclusion is that "50 per cent of the patients representing a group hitherto regarded as beyond appreciable benefits from radical surgical therapy were afforded some measure of relief which

From Mercy Hall Hospital and Tumor Clinic, 269 Mack Avenue, Detroit, Michigan.

it is believed could hardly have been received by more conservative procedures."

Howes and Shapiro[14], from the Brooklyn Cancer Institute, have published forty-two cases, all of whom were initially referred to the institution with advanced and recurrent carcinoma supposedly beyond attempt to cure. Following operation, diathermy and x-ray procedures, they were all ambulant and in good helath for 2½ to 14 years, the average being 4½ years. Included in the series are five patients who had had a previous laparotomy and had been considered hopeless at that time; sixteen were recurrences after primary excision had been attempted.

Their conclusions were that 70 per cent of the patients admitted to the Brooklyn Cancer Institute are definitely benefited by palliative methods of treatment, and that five per cent of advanced cancer can be salvaged. "This compares not unfavorably with the approximate five year cure rate of eighteen per cent generally reported for all cancers."[14]

In order to illustrate this point of view, i.e. the possibilities of cure in the later stages of cancer, we have reviewed our experiences of the past few years at Mercy Hall Hospital and Tumor Clinic and selected the following case reports. They are arranged in two groups:

1. Patients who were referred to Mercy Hall for terminal care in a supposedly hopeless stage, yet upon whom operative procedures were done in an attempt to cure.
2. Patients dying in the institution and on whom autopsy revealed a still localized lesion.

"Curative" Operations upon Far-Advanced Growths

Ca Fundus Previously Diagnosed Hopeless Cancer but Found Suitable for Operation
(total hysterectomy)

Ann K., aged fifty-eight, was admitted November 16, 1945. She has never had a complete menopause, but has had episodes of bleeding from the vagina every two or three months since the age of about forty-eight (ten years). There has been some lower abdominal pain intermittently for the past ten years. In July, 1944 (one year and four months before present admission), a diagnosis was made of carcinoma of the fundus uteri and radium treatment advised. A series of radium treatments was given. On July 6, 1944, she had 1,400 mgm. hours. On September 1, 1944, she had 500 mgm. hours, and again on October 27, 1944, she had 500 milligram hours making a total of 3,200 milligram hours in three treatments over one and one-half years. Admission examination showed a pale, chronically ill, mentally depressed white female complaining of some burning and frequency on urination. Pelvic examination showed the uterus firm, about two and one-half times normal size and movable. Cervix was hard and movable, but was smooth. There was a fairly advanced radiation reaction on the cervix. It bled somewhat on examination but there was no tumor or ulceration on the cervix itself. HGB was 70 per cent, RBC was 5,380,000, WBC 14,050, NPN 47.5, Chlorides 475. A review of the slide of the curettage done in October, 1944 (two years before admission), revealed adenocarcinoma of the fundus about grade two.

The uterus was not too large and was only moderately fixed. It was decided to do a laparotomy with the possibility of doing a total hysterectomy, even though the prospects were not good.

Operation, performed November 16, revealed a large boggy, globular uterus the size of a three-month pregnancy. There were a few small subserous nodules. Both adnexae seemed normal. The uterus was wedged down in the pelvis, and the posterior-inferior portion was somewhat large. Hysterectomy, total complete, was done including cervix and adnexae. The uterine structures were somewhat glazed by the irradiation therapy. The attachments to the uterus were clamped and divided very easily. The posterior portion of the cervix was somewhat difficult to remove because of the narrowness of the pelvis and the boggy enlarged nature of this portion of the uterus. Convalescence was smooth except for some wound infection which healed promptly. Microscopic examination: very anaplastic cellular solid sheets of cells, with practically no tendency to differentiation. It was now much more anaplastic than the biopsy of two years before.

Comment.—The problem of radium treatment for carcinoma of the fundus uteri is still unsettled, and indications are drawn differently by different clinics. There is a trend in some clinics to rely upon irradiation alone for the treatment of carcinoma of the fundus. This is sharply opposed in other centers. Some feel that grades 1 and two do not respond well to irradiation and should be operated upon. By some the size of the lesion is more important; small cancers of the fundus being cured easily by any method. There is more agreement that highly anaplastic cancers are better given pre-operative radiation and later surgery rather than immediate hysterectomy. Only by combination of methods will a high per cent of cures be obtained.

The tortuosity and irregularity of the carcinomatous uterine canal, as a repository for a curative dose of radium inserted into it, is a special problem. The single radium or tandem applicator may avoid and leave untreated a large cancer area. Ingenious devices to improve this have been tried.

Some of these are: several wires with tandem applicators attached at different angles (Friedman[9]); multiple applicators containing small capsules on hinges (Martin[9]); "irradiators" of various sizes to fit the irregularities of the endometrium (Heyman[9]). Kaplan[16] devised a silver wire, shaped like an oval shaped coil, filled with radium capsules and introduced after the configuration of the cavity has been outlined by the injection of an opaque medium into the uterine cavity.

When the specimen from the above case was cut open, a long tortuous uterine cavity and a large boggy tumor mass were revealed. The endometrial cavity was filled by a large cauliflower growth showing little tendency to invade the uterine wall. In all probability, even in the best hands, the growth would have been inadequately treated with radium. All of the tumor could not be reached, and the carcinoma farthest away from the endometrial cavity would not get an adequate tumor dose.*

Advanced Carcinoma of Rectosigmoid, Post Colostomy Four Months Ago. Resection, Subsequent End-to-End Anastomosis, One Year Later

Nancy K., aged thirty-five, was admitted to Mercy Hall, June 2, 1944. She had been operated upon March 13, 1944, three months before admission. She had had constant diarrhea before that operation but no loss of weight. There had been pain with enemata and it had been very hard to get return. The operation had consisted of a colostomy. The proximal opening was almost pencil sized, but it functioned satisfactorily. The distal loop opened immediately above the pubis. Evidently she had had a Lahey type colostomy. Why the patient had not returned to the original hospital for the secondary operation and resection was not known. At any rate, she presented a colostomy for presumably a carcinoma of the rectum which had been done four months before. After some deliberation it was decided that it was worthwhile exploring to see whether the condition was positively inoperable.

A second operation was performed, June 8, 1944. The abdominal opening of the distal loop immediately above the pubis was turned in, and the previous midline incision was re-entered. A mass could be felt in the lower bowel loop just above the rectosigmoid junction. There were no glands in the immediate vicinity of the growth. The mass was found to be about 2 inches long and the lower end was about 1 or 1.5 cm. above the peritoneal reflection. Except for some dense adhesions to the pelvic structures, it seemed localized. There were no glands palpable along the iliac vessels or the mesentery along the spine. The liver was negative to palpation.

The mass in the rectosigmoid was removed. One or two adherent loops of small bowel in the pelvis were left alone. In freeing the growth, a perforation was revealed and an abscess cavity was entered. The lumen of the bowel communicated with a pocket above the fundus uteri and toward the iliac fossa. This was separated away by blunt dissection. The bowel was cut across from about 2 inches below the growth and the distal end turned in aseptically over a Furniss clamp, a double row of inverted sutures placed and the abdomen closed. The patient's condition would not warrant any further extended procedure, and it was uncertain whether, in view of the gross perforation and the adherence to the posterior peritoneal wall, there had not been too much local extension to contraindicate radical surgery. The patient was told that perhaps at some later date, if the growth had not extended, an attempt might be made to close the colostomy and reunite the bowel. She convalesced satisfactorily and gained weight.

At the third operation, performed February 2, 1945, a transverse colostomy was made, preliminary to an attempt at reuniting the lower bowel. For the fourth operation, March 19, 1945, the planned procedure was to reunite the sigmoid to the lower rectum, but after the abdomen was entered the uterus and adnexae were quite matted down with adhesions. It was quite difficult to separate these out, and it was decided to do a supravaginal hysterectomy including both adnexae and close over the stump of the cervix. Another attempt was made September 3, 1945. Again when the pelvis was exposed adhesions were quite dense, and by the time the rectum was carefully identified, the patient's condition did not warrant very much more operating. Accordingly one or two sutures were placed on the stump of the rectum and the abdomen closed. The sixth operation was performed November 28, 1945. Her condition had now improved so that anastomosis could be made with safety. The colostomy in the left inguinal region was freed from its abdominal wall and skin attachment and the sigmoid mobilized. The stump of the rectum was easily seen and dissected free. There was sufficient bowel to bring the upper loop down and effect an end-to-end anastomosis. There did not seem to be very much tension on the suture line. The abdomen was closed with drainage. On December 9 bowels moved spontaneously through the rectum, even though the transverse colostomy was still patent. At the seventh operation the transverse colostomy was closed and normal bowel function followed.

Comment.—Oftentimes carcinoma of the rectum and sigmoid is very slow growing, and tends to remain quite local while an extensive mass invades contiguous structures. Attempt at radical removal should be made if one can at all en-

*Gray, Friedman, and Randall[11] have just reported six cases of adenocarcinoma of the fundus uteri upon whom panhysterectomy was done thirty to sixty days after careful irradiation dosage ranging from 6,000-12,000 mgm. hours.

"Nests of apparently viable cancer cells were found in the superficial myometrium in six out of the seven excised uteri, with deeper extension in three. Three patients had metastasis to the ovary."

These authors carefully reviewed the literature to find out exactly what the statistical evidence was for the pre-operative value of irradiation in carcinoma of the fundus. Their conclusion was that the available statistics are based on small series varying from ten to thirty-seven cases. The five year arrests range from 38 per cent in thirty cases to 90 per cent in ten cases. Series of as many as 100 cases with uniform radium treatment, in doses of 4,000 mgm. hours or more, should be available before the role of pre-operative irradiation can be evaluated.

compass the involved regions. Large portions of the bladder wall, trigone, one ureter, prostate can be removed with hope of cure or marked palliation (Dixon and Benson[8]) at operation. It may be difficult to tell the difference between inflammatory infiltration and neoplasm, as in the above case. Dixon and Benson advise proceeding with the resection in this event, because "no further subsidence of the inflammatory mass was to be expected, and the diseased bladder continues to 'feed' the infection." They reported sixty-four cases where carcinoma of the sigmoid and rectum was adherent to or had perforated into the bladder. Forty underwent extensive resection, and twenty of these were living; seven, more than five years.

It is not too difficult to find case reports where good results followed secondary resections for recurrent cancer of the sigmoid and rectum. Some of these follow:

Johns[15] (Richmond, Va.) did a Kraske operation for carcinoma of the rectum in a man aged twenty-six. Fifteen years later the growth recurred locally and he was able to do a combined abdominoperineal resection. The patient was well one year later. Gregg and Dixon[12] of the Mayo Clinic report the right half of colon and 20 cm. of ileum removed for cancer of the cecum; two years later they did a wide excision of mass of adenocarcinoma in the abdominal wall.

In another case, the descending colon and 2 inches of the small bowel were resected for cancer of the sigmoid. Nine months later 12 inches of ileum was resected. The colon was normal by x-ray five years later.

Howes and Shapiro[14] report a series of five cases of carcinoma of the colon and rectum, all of which had recurred following previous operations (peristomal recurrence; multiple pericolostomy and abdominal wall recurrences; postlaparotomy massive perforating tumor, et cetera). Following secondary colon and rectum resection they were all arrested or cured in from two and one-half to eight years.

Carcinoma of the Vulva, Referred as Hopeless, Found Suitable for Resection

Mrs. Mary M., aged sixty-five, was admitted February 10, 1945. She had complained of a sore in the left vulva for one year. It started as a small red area on the lower left vulva orifice and had gradually gotten larger. Three months ago it was about the size of a quarter. Biopsy at that time revealed carcinoma, and the patient was referred to Mercy Hall for palliative therapy far-advanced carcinoma of the vulva. It was considered inoperable.

Examination revealed a thin, frail-looking woman. There was a flattened ulcerated lesion on the left lower vulva, about the size of a half dollar. It crossed the midline at the posterior commissure and extended over to the right side. The surface was granular, excavated, and friable. It extended into the vaginal vault for a distance of about 1.5 inches. Beyond this the deeper vaginal wall was clear. The chief problem as regards operability was an extension in the posterior commissure toward the subjacent anterior portion of the sphincter ani. However, a finger in the rectum could feel about 0.5 cm. of firm normal tissue between the rectum and the infiltration of the growth.

There was one suspicious gland in the left groin below the mid-portion of Poupart's ligament; otherwise the inguinal regions were negative. Certainly local radium therapy to this lesion offered nothing. The entire area was quite irritating and painful, and instead of palliation one might get radiation necrosis and more pain.

It was decided to widely resect the local lesion, attempting to preserve the sphincter. If the sphincter was involved or the growth recurred later here, further excision with a permanent colostomy could be done, since this would be infinitely better than the patient's present status.

On March 5, 1945, the growth was widely excised, using a cautery excision for much of the dissection. The sphincter fibers were exposed and carefully preserved. At one place about one inch above the sphincter, the rectum was entered with the cautery. This was repaired with inverting sutures. Convalescence was satisfactory, except that this perforation had to be closed again three weeks later. Rectal continence was established and she has had normal bowel movements since.

The left inguinal mass was watched carefully. The single gland which had been noted on the admission examination did not diappear, so on June 13, 1945, a wide left inguinal gland dissection was done. A long obliquely vertical incision was made from three inches above Poupart's to the lower apex of Scarpa's triangle and all of the subcutaneous fatty tissues widely removed. In addition the inguinal canal was opened, the epigastric vessels ligated, the transversalis fascia divided and the region of the brim of the pelvis exposed. There was only one soft gland immediately mesial to the femoral vessels. Microscopically, this was negative. One gland of the resected mass contained cancer, but sections of nine other glands were negative.

Except for some residual edema in the left leg, recovery was satisfactory and to date (January, 1946), six months following operation, she is well and comfortable. The right groin so far is negative. It is being carefully watched. Resection will be done if any suspicious nodes are palpable.

Comment.—Wide excision of the vulva is the only curative treatment for vulvar carcinoma, all authorities agree. The literature is not extensive,

most texts and reports seemingly quoting Taussig's procedures and statistics. Evidently cases are few, and radical procedures are not, by and large, done frequently. Vulvectomy was done eleven times for carcinoma in 2,971 gynecological operations at the Mayo Clinic in 1944.[18]

A wide radical dissection of the groin can be done which is comparable to that in the axilla. The inguinal canal must be opened, and the path of spread along the iliac vessels searched. This dissection has become more in vogue lately (Pack[19]) although the approach is not new.

Operation on Far-advanced Carcinoma of Ovary with Benefit

Mrs. Laura B., with carminoma of the ovary, recurrent after two operations and x-ray treatments, is alive and well twelve years after the first operation. She was operated upon in June, 1936, at University Hospital, Omaha, Nebraska, when twenty-two years of age. A letter from the hospital stated that "she had had a left oöphorectomy and appendectomy and our pathologist reported adenocarcinoma of the ovary. The left ovary presented small cysts containing mucoid substances and some of these cysts were scattered throughout the abdomen." The operation was followed by deep therapy in July and December, 1936. She apparently felt well until May, 1941, five years later. Then she began to feel bad, had loss of appetite, loss of weight and weakness. There was no abdominal pain. She complained of "lots of gas," took physics every two to five days. There was 15 pounds weight loss. One year later (May 2, 1942) she was operated upon by Dr. M. P. Meyers and Dr. Saltzstein. A large pelvic mass densely adherent to the omentum and pitted with nodules was found.

The operative notes read as follows: "The abdomen contained no fluid but the omentum was everywhere studded with white nodules which were evidently a metastatic malignant spread. There was a 4 to 5-inch diameter right ovarian cyst attached to the lateral side of the pelvis and the remnants of the broad ligament, also attached inferiorly to the bladder at the cervical stump. With some difficulty this cyst was dissected free during which time the contents opened, a grumous fluid escaped and the papillary projection of the inside of the multiocular cyst was seen. Also the right ureter was inadvertently cut across in removing the cyst from the lateral wall of the pelvis. The mass was adherent to the ureter, and the ureter went directly through it. A somewhat smaller mass in the left side of the pelvis was left alone. The right ureter was anastomosed but this did not hold, and two weeks later a right nephrectomy was done. Pathological report of the abdominal mass revealed "papillary cystadenoma. Will produce implantations."

On July 17, 1942, she was referred to Mercy Hall for deep therapy and somewhat hopelessly for terminal care. Following a course in deep therapy, the mass in the left side of the pelvis shrunk about 50 to 60 per cent.

She has been examined at intervals since. At present (February, 1946) she is well and able to earn her living. doing housework. A mass about the size of a plum can still be palpated in the left lower quadrant close to the rectum. There has been no recurrence of symptoms, no loss of weight. We had considered further resection of the tumor on the left side of the pelvis, but because of the experience with the adherence to the ureter on the right side we decided against operation.

Comment.—This is evidently one of those papillary cyst adenomas of the ovary which even though widespread in the abdomen sometimes respond to resection of the masses plus irradiation therapy. It is one of the few carcinomas met with clinically, where repeated surgery and radiation can accomplish long arrests, and repeated surgical resection may be indicated. Brunschwig again, in his article, shows photographs of just such a case of papillary carcinoma of the ovary in which at a follow-up visit (four years after first O.R.) multiple intra-abdominal masses were found. He removed several metastatic nodules from various parts of the intestines, peritoneum, and even the liver. The patient was well seven months later.

Cancer Still Localized at Necropsy

Carcinoma of the Stomach Still Local at Autopsy

Carl S., aged forty-seven, was admitted to Mercy Hall August 18, 1943.

Present illness started in August, 1941—2 years ago. At onset there was blood in the stools. He first saw a doctor one month later. X-ray at that time showed a resectable tumor of the stomach causing obstruction. There was frequent vomiting.

Gastric resection had been done two months after onset of symptoms (October, 1941). He felt fine, gained 40 pounds after the operation and was able to eat a full diet. He was improved for about one year. Then there developed a sensation of pressure in the abdomen with fullness. He went on a milk and cream diet with some relief. In March, 1943, he stopped working and since then had become weak again, having lost 25 pounds during the past three months. Pain in the epigastrium and right lower quadrant has been intermittent, appetite poor.

Physical examination on entrance revealed an emaciated thin man with evident loss of weight. There was an indefinite mass, or rather a hard area, in the left upper quadrant. X-ray, August 25, 1943, revealed "the remaining fundic segment of the stomach measured five inches." There was a filling defect 1 inch in length on the lesser curvature which appeared to extend onto the adjacent jejunum where the gastro-enteric anastomosis had been done. There was some delay in emptying the stomach. Hemoglobin, 7.5 gm.; red blood count, 4,620,000; white blood count, 15,300; hematocrit, 18 per cent. Diagnosis: Recurrent malignant lesion involving the site of anastomosis.

The patient was up and about in the hospital for

about one month, feeling comfortable. He required only an occasional sedative; codein daytime, morphine at night. He ate moderate quantities fairly well. Toward the latter part of the month he required more sedation but still usually emptied his food tray.

On September 26, while in the bathroom, he collapsed after a large hematemesis. This continued, and in spite of transfusions and supportive therapy, he died two days later.

Autopsy revealed the cardiac and fundal portions of the stomach were distended by about 1,000 c.c. of dark blood and blood clots. There was a large ulcer just to the left of the previous gastrectomy site, about the size of a half dollar, encircling the stomach stump with an annular ridge of tumor, friable and grey, about 0.5 inch wide and 0.5 inch deep. The lower segment of this ring infringed on the gastro-enterostomy stoma, narrowing it. The carcinomatous ulcer was adherent anteriorly to the undersurface of the liver and posteriorly to the pancreas and adjacent loops of small bowel.

There was no free fluid in the abdominal cavity. There were no metastatic deposits anywhere. The liver was pale and showed some fatty changes; otherwise the abdominal and thoracic viscera were negative. Patient evidently died of a sudden intragastric hemorrhage.

Comment.—This tumor, at autopsy, two years after a subtotal resection, was still local. To be sure, it was a large mass, involving some of the adjacent small bowel, but from the postmortem appearance, resection might have been attempted even as late as his entry into the hospital one month before death.

The trend in gastric surgery for carcinoma is ever wider and wider resection. With the modern control of shock with large quantities of blood and the accurate control of body chemistry, such extensive time-consuming operations are being done with more frequency even in these debilitated patients.

Incidentally, the primary resection for cancer must be very wide of the growth. It should include the glands about the left gastric artery, the entire greater omentum, and a very wide removal of the stomach above the growth. Certain types of gastric carcinoma have a tendency to infiltrate widely in the submucosa, so that the extent of the lesion on gross palpation may be misleading. This patient still had 5 inches of stomach above his resection, and at autopsy the organ held 1,000 c.c. of blood.

Secondary extensive resection for carcinoma of the stomach, months or even one to two years after a previous operation, are being reported with increasing frequency. One of Howes' and Shapiro's[14] cases was that of an extensive tumor—a large palpable mass considered inoperable one year before. Subtotal gastrectomy was done, and the patient was well six years later.

Brunschwig[3] reported the following remarkable results: Subtotal gastrectomy for carcinoma of the stomach with extensive lymph node and omental metastasis. Carcinoma had perforated two months previously and was repaired in another institution. The patient remained well two years, then died of metastasis.

Another case: "Resection of transverse and descending colon and segments of ileum and jejunum for obstruction due to metastasis from gastric carcinoma resected two years previously. Lived two years with normal activity most of this time.

Carcinoma Esophagus Still Local At Autopsy

Celkia K., aged seventy, was admitted to Mercy Hall, November 9, 1944.

Four months before, food "began to stick in her chest," and there was occasional vomiting. Dysphagia became progressive until about two weeks ago, since which time she had been unable to swallow even water. Then she sought hospitalization.

Examination revealed a dehydrated and emaciated old lady unable to swallow even liquids without distress. X-ray showed a carcinoma of the lower esophagus causing complete obstruction. There was also an enlarged heart from hypertension, a dilated and tortuous aorta, and some emphysema. A gastrostomy was done November 21, 1944. The patient was taught to feed hrself, and she was sent home. She died at home seven months later (June 24, 1945). She had been comfortable most of this time, had taken her gastrostomy feeding regularly and maintained her strength. She died suddenly.

Autopsy revealed the cause of death to be a tear or rupture of the intima of the ascending aorta, 2 cm. in length, producing a large blood clot in the periadventitia of the ascending aorta, with descent of the blood clot into the pericardial sac, tamponading the heart.

The esophagus exhibited a well-circumscribed oval shaped neoplasm extending from the cardia of the stomach 4 cm. upward in the distal end of the esophagus. It was firm, solid, not friable, and had not invaded the serosa. There were no regional or distant metastases. Intra-abdominal organs were otherwise negative.

Death was thus due to a rupture of dissecting aneurysm of the aorta. The esophageal carcinoma was still local and resectable (provided the vascular system could have withstood the procedure) seven months after gastrostomy had been done.

Comment.—During the past five to ten years, the operation for carcinoma of the lower end of the esophagus had become well standardized. The symptoms come on early and are striking. The transthoracic approach permits of wide exposure and is even less shocking than the abdominal ap-

proach. In the future, many more of these cases will come to resection. What was an extreme rarity, is now being reported from several sources with increasing frequency and not too much risk: i.e. transthoracic resection of the lower end of the esophagus with intrathoracic anastomosis of the stomach to the proximal end of the esophagus.*

Carcinoma of Pancreas Still Local At Autopsy Four Years After Palliative Operation.†

Mattie A, aged thirty-eight, was admitted to Mercy Hall, March 9, 1945.

She was operated upon at Women's Hospital by Dr. Wm. E. Johnston. We are indebted to Dr. Johnston and Dr. Frances Ford for the notes from this Hospital Admission.

The patient had complained of pain and tenderness underneath right costal margin to back for one year. Jaundice developed two weeks before admission to Woman's Hospital in July, 1941. She weighed 90 pounds, had a hemoglobin 60 per cent, red blood count 3,250,000.

At abdominal exploration July 25, 1941, the head of the pancreas was the size of a large plum, round, and hard. Gall bladder was distended, common duct dilated. No evidence of gall-bladder disease.

Cholecystgastrostomy was done and biopsy specimen taken from the pancreas. Miscroscopic examination revealed "new growth consisting of anaplastic epithelial cells having a ductal differentiation. Adenocarcinoma of head of pancreas (ductal in type). Malignancy grade 2."

The jaundice disappeared twenty-one days after the operation and the patient went home. She had evidently been fairly well for four years since the operation, was doing her own house work and felt strong. However, during the past eight months, i.e., since August, 1944, she had failed. There had been edema of the legs since July, 1944. She had not eaten well and had lost 40 pounds in the past eight months. She had evidently been on a deficient diet for the last eight months in that she never ate any fruit or milk.

General examination revealed a very emaciated, thin woman. Abdominal examination was negative except for scars of previous examination.

Blood count showed moderate anemia, red blood count 3,200,000 with 62 per cent 10.5 gms. hemoglobin, white blood count 6,300.

X-ray revealed a defect in the pyloric portion of the stomach close to the duodenum which was thought to be pressure from an extragastric mass. The stomach itself showed no intrinsic lesion.

Her course in the hospital was further downgrade. She appeared mentally deficient, said many foods were not good for her, seemed lethargic, weak, not interested in her surroundings and died three weeks after entrance to the hospital on April 29, 1945.

Autopsy revealed a large adenocarcinoma involving the head and mid-portion of the pancreas. It was a nodular, grossly spherical tumor mass 8 x 10 cm. in diameter, but was entirely localized, and could be shelled away from the smaller distal portion or tail of the pancreas. When removed it left the bed of the pancreas clean and free; there were no fixed extentions which would have prevented resection, and there were no local or distant metastases.

Microscopic examination revealed adenocarcinoma somewhat more malignant than that shown in the biopsy taken at the laparotomy in 1940, but still easily recognizable as the same cell type.

Summary. A case of carcinoma of the pancreas, proven by biopsy in 1941, and at autopsy in 1945, still local and apparently (as far as autopsy appearances showed) still resectable.

Comment.—Carcinoma of the pancreas is notoriously a disease of short duration from the onset of symptoms to exitus. The total lapse of time between these two events is given as six months[4]; nine months, average (two and eighteen months extremes in eight patients not operated upon)[7]; six to eight months[2]; seven months[1]; five to eight months; longest, two years.[20]

Ransom[20] reviewed 109 cases of cancer of the pancreas at the University of Michigan Hospital in 1938. The average duration of symptoms before admission was 5.5 months, and the average length of life after palliative operation of cases in that institution by a previous report (Coller and Winfield[6], 1934) was 7.2 months.

Ransom states, "In view of the notoriously rapid progress and relatively short life history of the disease, the histories of illness lasting over one year are perhaps open to question. In such instances it is quite possible that symptoms antecedent, such as gall-bladder disease, peptic ulcer, et cetera may have merged with the earliest symptoms of cancer." He further states that "long periods of relief of symptoms (following palliative operation) are occasionally reported. In such cases one is driven to the conclusion that the mass felt at the time of the operation was in fact inflammatory rather than neoplastic and that the internal drainage of the biliary tract resulted in a permanent cure."

Lahey[17] states, "Many of these patients live comfortably for several months (following palliative short-circuiting operations) and occasionally two to three years before dying from slow-growing carcinoma within the head of the pancreas." But he added "The length of time over which some of the patients upon whom we have done chole-

*Clagett[5] recently reported that he had done the last eighteen resections of the cardiac end of the stomach and lower esophagus without mortality.

†This case is reported in detail elsewhere.

cystenterostomy for jaundice have lived can be explained only by the fact that in some of the cases the obstruction was benign in character." Other authors have similarly expressed the feeling that long-time arrests were probably benign conditions rather than cancer.

We have not been able to find an instance in which a patient with proven carcinoma of the pancreas lived four years after operation, such as happened in this case. There are, however, occasional reports of carcinoma of the pancreas which are still local at time of autopsy, and upon whom, as far as gross autopsy appearances went, a radical resection might have been done.

Gordon-Taylor[10] states: "In one case of my own in which three palliative operations of diverse nature had already been performed during the previous fifteen months and in which the diameter of the tumor was nearly 3.5 inches, the affected portion of the head of the pancreas was found at necropsy still to retain mobility and showed no involvement of the portal vein or its parent tributaries, and there were no metastases."

In Ransom's series, in thirty autopsies five tumors originating in the biliary ducts were still localized, while two pancreatic cancers, one in the head and one in the body, were still local. Hick and Mortimer[13], in fifty necropsies, found three cases in which no metastases were found. These were scirrhosis carcinoma of the head of the pancreas. Rives[21] et al. reported that eight cases out of ninety-six were found at necropsy to have localized and resectable lesions.

The lesson clearly is that, with modern surgical improvements in technique and availability of large amounts of blood, there is a wider scope for operative removal. Involvement of the stomach, duodenum, middle colic vessels, even a portion of the portal vein are not absolute contra-indications to wide removal. Such resections represent an attempt at cure or long-time arrest, not palliation for a few months.

Carcinoma of the Larynx

Tredo T., aged fifty-five, was admitted to Mercy Hall November 13, 1945.

He complained of hoarseness in February, 1945. He was treated for sinusitis without any improvement until March, 1945. At that time the carcinoma of the larynx was discovered. He was given x-ray therapy starting March 21, 1945, and received daily treatment for twenty days. It was discontinued for 6 weeks, and then he received 16 more treatments completing this cycle July 16, 1945. There was a progressive weakness and he says no improvement of hoarseness.

Admission examination revealed a rather heavy man, chronically ill. There was marked hoarseness and considerable dyspnea. He was comfortable sitting in bed only and could not lie flat. The laryngeal examination revealed that the right cord was fixed. There was a smooth nodule in the posterior commissure on the right side. The epiglottis was deformed, and there was edema of the right pyriform fossa obstructing the vision of the tissues in the base of the fossa. There was no necrosis. The cervical nodes were negative. The skin of the neck showed minimal radiation changes. Hemoglobin was 76 per cent, red blood count 4,720,000, white blood count 8,800.

Course in hospital: Patient was alternately quite dyspnoeic and then more comfortable. For a few days he scarcely could breathe, and then he felt better and he breathed more easily. Repeated laryngeal examination showed about the same condition. One day before death he was examined carefully. The aperture seemed sufficiently large for easy breathing. However the patient complained of some hoarseness. That night he seemed more comfortable, conversed easily and seemed in good general condition. The next morning at 6 A.M., the patient suddenly choked, gasped, could not get his breath and expired suddenly.

Postmortem: The right pyriform fossa was occupied by an excavated granular ulcer 1.5 cm. in depth. It appeared to have started at the base of the epiglottis, extended laterally to involve the pyriform fossa and downward along the aryepiglottic fold toward the cricoid, and produced fixation of the right vocal cord by spreading underneath the mucosa without eroding it.

There was considerable edema above and below the vocal cords, which seemed to be post-radiation inflammatory reaction. There was very little breathing space between the vocal cords—it was scarcely possible to push an artery clamp through the aperture.

Comment. The location was extrinsic in the pyriform fossa. This is considered by most laryngologists to be a contraindication to laryngectomy. However all surgeons do not feel so.

Patients are often given prolonged x-ray therapy and not observed carefully enough for complications which the x-ray therapy itself produces. In this case the edema and difficulty in breathing were produced, in part at least, by x-ray therapy. We had considered doing a tracheotomy while in the hospital, but were a bit reassured by the temporary improvement in the patient's condition. At autopsy it was easily seen that there was considerable edema at and above the vocal cords and it would have been several weeks before this entirely subsided. A tracheotomy should have been done shortly after admission to the hospital or before instituting therapy. Further treatment could then

have been more intensive; perhaps local cauterization and radon seed implantation to the carcinoma in the pyriform fossa, or perhaps consideration of laryngectomy later.

Carcinoma of the Rectum, Recurrent, Still Local at Autopsy.

Harvey K., aged sixty-nine, was admitted to Mercy Hall, July 8, 1945, and died October 18, 1945.

His present trouble started in July, 1945, about one year before admission. There was diarrhea alternating with constipation. This was treated with medicine for a while; later blood was seen in the stools. He was examined and the diagnosis of carcinoma made, and local operation for this was done in February, 1945, five months ago. There was loss of most of his sphincter control after this operation. Examination revealed a fairly well nourished man seemingly slightly pale. Locally the normal sphincter ani was replaced by a firm stricture which bled and was quite tender on examination. Hemoglobin was 62 per cent, 10.5 gms., red blood count 4,317,000, white blood count 12,750.

After some weeks' observation at Mercy Hall, it was decided that rather than being hopeless, the lesion warranted further resection, i.e. abdominal perineal resection, or perhaps posterior resection for carcinoma of the anus.

On October 3, 1945, a preliminary colostomy was done. The patient died two weeks later of intestinal obstruction due to a loop of small bowel being kinked at the peritoneal suture line. This was not recognized antemortem.

However, autopsy revealed that there was no further carcinoma in the abdominal cavity. The liver, rectoperitoneal, para-aortic glands, et cetera were all negative. The rectum showed a granular, friable carcinoma about the size of a quarter in the left anterolateral portion of the anal region. It infiltrated about 0.5 cm. in the perianal tissues at this site. Otherwise there were no further extensions. The lesion, from the autopsy findings, was still strictly local and still amenable to wide surgical removal.

Summary

Several clinical histories of patients are detailed. All of them were referred for custodial care in a supposedly hopeless state. In one group it was found possible to resect the lesion. In the other group the lesion was still local at autopsy.

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MSMS

Treatment of Migraine and Related Headaches

The majority of patients affected with severe headaches show signs of metabolic disorder which can be diagnosed by the salt-tolerance test and demonstration of salt and water retention.

The retentional type of headache responds in the large majority of cases to a simple treatment consisting of a high-protein diet with restriction of salt, water, and carbohydrate intake and to medication with ammonium and organic potassium salts. Sedation with a mixture of atropine and phenobarbital is also necessary. Added therapy with endocrine preparations should be considered, if warranted by evidence of endocrine deficiencies.—M. A. Goldzieher, M.D., New York City; New York State J. Med., March 1, 1946.

* * *

Little Joe Genius says—

I see where Eleanor in her My Day says it has been a long fight to put the control of our economic system in the hands of the Government, where it can be administered in the interests of the people as a whole. That fits with her endorsement of compulsory health insurance.

Little Joe Genius says—

I see that Senator Ellender remembers the power OPA took unto itself, and does not relish a repetition in health care.

Editorial

MALPRACTICE THREATS

MALPRACTICE CASES are increasing in number. Several such cases have recently been started against Michigan physicians who unfortunately have no protection in the form of insurance.

For years the Michigan State Medical Society gave such protection to its members, but that was discontinued several years ago because of legal advice. It was found that there are many mediums of securing such coverage and to operate such service would place the society in a tax bracket we did not wish. It seemed better and no hardship for the individual doctor to provide his own insurance. But the individual doctor is forgetful. Too many have allowed their insurance to lapse.

Discharged medical veterans should promptly reinstate their civilian malpractice insurance. Not to do so might be costly; the expense is small, and the benefits are great.

And this advice might well be followed by non-veterans who have been negligent.

COMPARATIVE HEALTH FACTORS AMONG THE STATES

THE HEALTH of a population depends upon many factors such as income, sanitary and medical facilities, culture, social control, climate and special phases of the environment."—From the ninth annual report of the Social Security Board.

An article in the February 1, 1946, number of the *American Sociological Review* has selected and tested statistics as a health index of the States. Michigan with a population of 5,256,106 is 65.7 per cent urban, while the whole United States is 56.5 per cent urban. We have 6 per cent large families*, 4.2 per cent non-white, and 6.3 per cent over sixty-five years of age. We have forty-one per thousand infant deaths, and rank seventeenth in the United States. Deaths from heart disease are 296.8, from tuberculosis are 34.1 and from contagious diseases 2.5.

In the draft we had 26.4 per cent rejected because of physical defects only. The USA rate was 27.1 per cent, and Michigan ranked twenty-second. There were nine states with rejection rates of 40.0 to 46.2. These figures are not accurate, being made from samplings of 20 per cent of all registrants. Approximately 30 per cent of all rejections were for mental defects and deficiency.

In the field of sanitation there are in Michigan 27.2 per cent of dwellings without sewer connections, or needing major repairs. The rate for the USA is 35.5 per cent and we rank twelfth. For defective housing the rate is 14.0 per cent, and the rank, tenth.

By general consent social workers have set up a rate of one doctor per thousand persons, 2,000 to a dentist, and 250 per hospital bed. In Michigan these rates are 826, 1978, and 238, while in the whole United States the rates are 748, 1860, and 283. Michigan has a per capita wealth of $2,676, income of $689, and savings of $133 against USA figures of $2,335, $575, and $156. Michigan ranks first of all the States in expenditures for health and accident insurance, $6.46; New Mexico is $5.28, Nebraska $4.79, California $4.60, Connecticut $4.45, and the USA $2.43. Health insurance started in the United States around 1850 and 40,000,000 people were covered in 1940.

Michigan ranks tenth in economic resources, seventeenth in culture and in 1943 was ninth in Blue Cross hospitalization plans. We are nineteenth in medical facilities.

April 30, 1946, 1,227,569 persons, or 23.3 per cent, had Blue Cross hospitalization in Michigan, and 838,336, or 14.9 per cent, had Michigan Medical Service Coverage.

WAGNER-MURRAY-DINGELL BILL

HEARINGS have been held on this bill and many persons have testified for and against it. The attitude of the Senators holding the "Inquest" has been critical of those doctors and others who were not full supporters of the bill. It has been difficult to secure a chance to testify unless the trend of the opinion to be expressed was favorable. Many doctors of pink leanings, who have favored the bill, have claimed AMA membership, but have differed with the majority opinion of the AMA. These have been encouraged to testify.

To read the evidence as it has been presented

(Turn to Page 930)

*Three or more children under ten years.

The San Francisco Meeting

President's Page



The latter part of June and the first week in July marked the first meetings to be held in two years for many national medical societies, including the American Medical Association.

At the San Francisco meeting, your state society was represented by your duly elected delegates who had previously consulted with the officers and Council concerning policies to follow and matters to present. There were many things for the parent body to do pertaining to present-day medical trends, and it is gratifying to note that it did something very constructive toward reorganizing home office activities, and to activate its public relations policies. These policies are much in keeping with those held by Michigan for quite some time, and it is hoped that this turning to a positive and progressive program will be developed into one that will place the American Medical Association in a position to command the highest respect of the people of this country, and to be recognized as the fountain head of medical leadership.

H. Monnich

President, Michigan State Medical Society

(Continued from Page 928)

one would find it difficult to make a just decision. The medical testimony has been unfavorable to the bill except from biased groups, and much other testimony has also been unfavorable, but there have been long lists of non-medical men who have presumed to know how to run the health services of the nation. Most have favored government control, and some (notably Altmeyer) have insisted that the patient has free choice of physician, but admitted that if he exercised that choice for a doctor not registered with the plan he would have to pay the doctor himself. He still insisted that was free choice.

The impression is again getting spread among medical men and their friends that this bill is dead, that it will never survive this hearing to be reported out and acted upon. That is just the attitude the proponents of the bill hope we will take, and then it can suddenly be revived and passed in short order. Happily there is one obstacle to be hurdled. That is the new Taft-Ball-Smith Bill, S-2143. On other pages we are publishing material about the Taft Bill.

TAFT-BALL-SMITH BILL S-2143

WE HAVE LONG BEEN advocating that it is time for the medical profession to advocate some *constructive* measure on the increasingly important subject of National Health Insurance. We HAVE something to offer, and Michigan particularly. We have made Michigan Medical Service and Michigan Hospital Service a force to demonstrate that the individuals in this nation can provide health for themselves if they wish, and without compulsion.

Senator Taft has seen the dangers of compulsory health service in the United States and has attempted to provide a bill that will give us the things necessary to come from government: (1) unification under one department of the numerous health agencies of the federal government; (2) a cabinet position; (3) provision of a method, with federal aid, to care for the low income group, and those who are unable to provide adequately for their own care by the prepayment service method; (4) he provides for certain research, and other services; (5) he does nothing to handicap the doctor. He is left free to practice medicine with the good results attained during the succeeding years of modern medicine. Conditions of practice under this plan will be much better, because services will be provided to the low income group in a manner which we will have helped to formulate.

We have heard some doctors lukewarm to the Taft Bill, claiming it is not complete, admitting it has some good points, but considering it just as a stopgap for the compulsory scheme now being considered. We disagree. We believe that our doctors in all their contacts with the public, with persons interested in health service enough to listen, should boost the Taft Bill. It is a long step toward what we can accept, and will be perfected in the course of study. We have just reread the original Wagner-Murray-Dingell Bill and it is very different from the latest text. We cannot support the Wagner-Murray-Dingell affair, but we can and should give the Taft-Ball-Smith Bill every help and support, making suggestions for its betterment if we so desire, but placing ourselves in position of being FOR something.

MANAGEMENT'S RESPONSIBILITY FOR MEDICAL CARE OF EMPLOYES

THE DEVASTATING and crippling strike recently conducted by John L. Lewis and his coal miners brings this subject to our attention whether we wish or not. It is a subject with dynamite in it, but it is a subject we must face. There is now no alternative. On April 14, 1946, this subject was the topic of the University of Chicago Round Table over NBC. These facts were reported:

For several years an experiment in management providing health care for their employes has been successfully carried out by Hormel Packers. The results have shown the feasibility in certain types of industry, resulting in a greatly improved morale. At Hormel management financed the venture, and controlled it, with some co-operation from the employes. The Union Health Center of the International Ladies Garment Workers Union handles the management of the health service, with financing by the employers, but supervision of the work by the union.

Management in general believes that the workers must have the very best of medical and health care in order to give their best services. All interested parties concede that there are four points of agreement: (1) Full medical and hospital care should be given in all workmen's compensation cases, and all occupational disease cases, this care to be of the best and most competent that can be secured; (2) in distant, isolated, or other

plants where there are insufficient medical facilities, then the responsibility of management is to provide all necessary care; (3) in all instances the recognized confidential patient-physician relationship must be maintained at all times; (4) The industrial physician should be responsible only to the chief executive officer of an organization.

There is honest difference of opinion as to the responsibility of management for general health care other than industrial and occupational. There is no disagreement about the latter. The primary responsibility for care of men and machines, and their efficient operation, is in the hands of management. This is a duty that cannot be shirked if efficiency is to be maintained. But the method of payment and the details of operation are another thing. Some believe in a joint operation, even including joint responsibility for the costs. Others argue that the cost ultimately must and does come from management, because management must either pay the costs or pay the employes enough so that they may meet their own costs.

Voluntary Non-Profit Insurance

Another argument might be that since insurance is a well established American institution, the best way to handle this problem is by prepayment insurance, either non-profit and voluntary, or through commercial avenues with profit accruing to the purveyors of insurance. A third method is now being proposed by government—compulsion.

Workmen are intelligent individuals, and so are their employers, but the intricacies of co-operative, or voluntary, insurance are bewildering. Management might render its best service to its employes and to itself by actuating, and making available to its employes, the advantages, the information and the possibilities of pre-paid insurance for all the health care of the personnel (and their families) of the plants, or establishments.

It seems to us that this last function might well be a very obvious responsibility of management, and one about which there could be no disagreement. The workers are not generally in position to secure such advantages, but management can make the contacts and bring about the opportunity. *Satisfied and happy workmen are a company's greatest asset.* Healthy workmen and workmen's families are happy ones. And individuals who have reached happiness through endeavor, through their own efforts, are stalwart Americans. To have by right of strong right arm is vastly better than to have by right of dole.

Influence of Recent Strikes

This editorial was prepared in the early days of the coal strike, and not used. The settlement of the strike by agreement of government to allow a union to tax production has only made the problem more acute. The coal managers have not accepted. To do so would fix the causes of the next general strikes to include health service funds. Government is not consistent. The administration is advocating the compulsory health measure of Wagner, Murray and Dingell, for all the people, and in this settlement government has set up a plan to parallel their own. There will be a double tax. And this will grow, for all other labor leaders will be compelled to make their demands equal those of the coal workers.

We are still of the opinion that management is the most vitally interested, second to the beneficiary, in this matter of general health insurance. The coal strike settlement has not changed our minds, except it has made these problems assume vastly more weight. These settlements have furthered the conviction that a National Health program is sure to evolve. It may be through employment, rather than federal government. Whatever the outcome, medicine is interested, because we are the ones who must render the services wished. It is our opportunity to help write the plans, to help solve the administrative problems that must be met. We are able, we understand the problems. The laity will be groping for help, and, not knowing, will make irreparable mistakes which we would avoid. We have had the experience during the past six or seven years. That should now be offered in a helpful manner to work out problems too important to allow unskilled solution.

SOLO OR SYMPHONY?

Such is the title of a booklet published by the Medical Group Practice Council of the Medical Administrative Service, Inc., Kingsley Roberts, M.D., Director.

The booklet of forty-eight pages is in the form of letters from a Captain Walsh who went into the army after four years of private practice, with answers from Dr. Roberts. The Captain asks questions bearing on the practice he will do after leav-

ing the army? Shall he continue in private practice, alone? He has not been entirely happy, primarily because he didn't advise with some older heads, if we properly interpret his letters. However, Dr. Roberts' interpretation is a chance to boost group practice which he describes in all its glowing advantages. He describes the various kinds of group practice, making it include practically every type of practice but the private practice. He describes especially the diagnostic groups, the reference groups and the service groups.

Several types of group practice are described, based on ownership, financing, or type of control. These are illustrated. Advantages of group practice are set forth as more favorable financially for the younger man, in his first few years of practice, not so profitable financially in the middle years, and again more profitable for the older practitioner, who will have the income of the group to depend upon.

We have read the booklet carefully, and are impressed with the tremendous effort being put forth to advance the Group Practice plan. Much money is being spent, and several newly formed committees are working on the subject. Is it a socializing trend? We admit there are many groups, of national and international reputation, whose leaders have enjoyed the greatest honors the medical profession can bestow upon them. But there have also been leaders who arrived at the pinacle through their own outstanding efforts.

We hold no brief for this subject. We merely ask what is the financial backing of the present propaganda? What about the young doctor just returning from military service, who has never practiced medicine, or very briefly? We know many of them who are keenly anxious to practice by themselves. There is no reason they cannot render just as good service to their people as any group.

VETERANS' AFFAIRS

A NEW AND UNTRIED proposal never runs quite smoothly. The care of the veteran in his own home town by his own physician is new. It has never been tried before, and new rules had to be evolved for the proper administration. We have published the methods of procedure, and they have been sent out by the Veterans Administration to the various contact agencies, but things have not been understood.

If a serviceman is ill, or thinks he has a service-connected disability, and if he does not already have a service rating, he, his physician, or some interested person must contact the Veterans Administration, Buehl Building, Detroit, stating the above facts, and asking for an examination. This will be authorized, which authorization will be taken by the veteran to the doctor of the patient's choice. The doctor will make an examination, make a report on a short form, and be reimbursed through the Michigan Medical Service. The doctor will have indicated what treatment is needed, and how many visits per month. Authorization will then be made through Michigan Medical Service. The patient then goes to his doctor for treatment as planned.

If this proceeding is not carried out the program falls down. That is the reason for repetition of instructions. Some of the contact men of the Bureau in the various cities of the state are giving the veteran a slip instructing him to get a statement of his condition from his doctor, with diagnosis, what and how many treatments are needed, and the fact that the doctor is a member of the Michigan State Medical Society. This is not an authorization, and will not carry payment of the doctor, but the veteran thinks it is and does not understand. To him this is official, having come from the Veterans Administration contact man. It takes trouble and time to explain that the contact man has been wrong, and get the patient to start his claim right. If the doctor wishes to get his pay, that must be done, otherwise the veteran must pay for a service that has been promised him.

There have been other complaints that the plan is not working properly. There are certain Service Counsellors representing veterans' societies or other groups, who have advised veterans not to go to certain doctors, have referred them away from the men of their own choice. This has not been well received by the victims, doctors or patients, and has given this service a needless black eye in several instances.

PEDIATRIC SURVEY

THE AMERICAN ACADEMY of Pediatrics has undertaken a nation-wide survey of Child Health Services, to determine what services are available for the prevention of disease and for the general care of children, and to evaluate the quality of such services. If children are to receive the care

that they need in the postwar era, systematic planning to provide that care must be made, and exact data are needed.

The study in Michigan is now being organized, and is being financed by the Michigan State Medical Society, The Michigan Society for Crippled Children and Disabled Adults, Inc., and by generous personal contributions of the Academy members.

Letters have been sent by local pediatricians enclosing a questionnaire. It is with regret that this additional burden is placed on our members, but it is hoped they will realize the importance of this information, and will take immediate care in filling in the necessary data.

It must be emphasized that this is a Survey By The Doctors of Michigan to evaluate the available child health services. It is of importance that these questionnaires be completed as soon as possible and RETURNED. By doing so the practicing physician has the opportunity to determine the needs of Michigan and thereby determine the best methods to meet these needs.

With 100 per cent response, we can make this another Michigan First.

EARLY POSTOPERATIVE AMBULATION

Early ambulation following major surgery is rapidly gaining favor with thoughtful surgeons who see the excellent results obtained thereby. In selected cases, the patient is sitting up in bed the day of operation, standing and doing some walking with assistance the next day, with rapid restoration of normal activities thereafter.

Before undertaking this treatment as a routine, two important considerations must be realized. The surgeon must change his technique to embrace the use of interrupted non-absorbable sutures in all layers of closure of wounds. He must also take the extra time and precautions which prevent wound infections, and must be aware of the contraindications to early ambulation. These, briefly, are: prolonged preoperative bed rest, cachexia, cardiac insufficiency, recent coronary occlusion, shock, severe anemia, hemorrhage, or fear of hemorrhage, and the presence or suspected presence of thrombi or emboli. Other contraindications are suppurative conditions such as peritonitis, pancreatitis, cholangitis. Of course, cases of insecure anastomosis, copious tamponade and difficult hernial repairs are not candidates for early ambulation.

The marked decrease in complications such as postoperative pneumonias, atelectasis, infarcts, phlebothrombosis, urinary retention which requires repeated catheterization, abdominal distention, etc., is well worth the application of this new postoperative therapy.

One recent hospital study of over 400 surgical cases thus treated showed some postoperative complication in thirty-two cases as compared to seventy-four such complications in a similar sized group not ambulated. There were no serious wound healing complications, wound disruptions, severe hemorrhages, cases of ileus or deaths in the early ambulation group. Very few patients complain of more pain with this treatment and the improvement in morale is startling. The return to normal of these patients is markedly accelerated and there is a definite economic saving, financial and in hospital hours, to all concerned, the patient, doctor, and nurse.

Sherwood B. Winslow, M.D.

ON THE RUN

The physician cannot confine himself exclusively to the technological without harming many patients.

* * *

The importance of the diagnosis of deep phlebitis is exactly in reverse ratio to the ease with which it can be made.

* * *

While Hodgkin's disease may invade bone it usually does so after it has been progressive for a year or two.

* * *

Statistically, 50% of cases of myeloma have pathologic fractures sometime during their course.

Selected by W. S. Reveno, M.D.

THE PELVIC FLOOR

(Continued from Page 913)

(a) A blueprint of normal pelvic floor construction.

(b) A series of blueprints of primary and secondary impairments.

(c) A series of blueprints of the different steps to be taken.

(d) A blueprint of the restored condition that is a duplicate of (a) or a working substitute, remembering that an artist cannot paint a picture or an engineer build a bridge that he cannot first visualize.

4753 Broadway (Suite 1018)
Chicago 40, Illinois

THE 81st ANNUAL SESSION MICHIGAN STATE MEDICAL SOCIETY

Book-Cadillac Hotel, Detroit, September 22-27, 1946

INFORMATION

Registration, Fifth Floor, Book-Cadillac Hotel, Detroit. No registration fee to MSMS members.

Admission by badge only.

Military men and returned medical officers are especially and cordially invited to the MSMS Annual Session. No registration fee to men and women in military uniform.

Postgraduate Credits given to every member who attends MSMS Annual Session, Wednesday, Thursday, Friday, September 25, 26, 27, 1946.

House of Delegates, MSMS, meets Sunday, Monday and Tuesday, September 22, 23, 24. The scientific assemblies are held Wednesday, Thursday, and Friday, September 25, 26, 27.

Seven General Assemblies—**Ten** Section Meetings—**Nineteen** Discussion Conferences on September 25, 26, 27, all under one roof, Book-Cadillac Hotel, Detroit.

Public Meeting. The Third General Assembly, Wednesday, September 25, 8:30 p.m.—Officers' Night—will be open to the public. Invite your patients and friends to this interesting meeting.

Papers will begin and end on time. This scientific meeting will feature by-the-clock promptness and regularity.

Eighty-two technical exhibits containing much of interest and value. Intermissions to view the exhibits have been arranged. **Please register at every booth.**

County Secretaries Conference, Wednesday, September 25, Washington Room, Book-Cadillac Hotel, 5:30 p.m. A preprandial hour, dinner and an interesting and brief meeting. Will adjourn promptly at 8:30 p.m.

The Michigan Pathological Society will meet in the Statler Hotel, Thursday, September 26 at 3:00 p.m. Guest speaker will be C. F. Geschickter, M.D., of Baltimore.

The Woman's Auxiliary to the Michigan State Medical Society will present an attractive social and business program to which the wife of every MSMS member is cordially invited.

THE PROGRAM

All General Assemblies will be held in the Grand Ballroom, Book-Cadillac Hotel, Detroit

First General Assembly
Wednesday, September 25

Morning

A.M.

9:00 **Edgar V. Allen, M.D., Rochester, Minn.,** Associate Professor of Medicine, University of Minnesota, Medical School. "Intravascular Thrombosis and the clinical use of Anticoagulants."

9:25 **Fred W. Rankin, M.D., Lexington, Ky.,** Clinical Professor of Surgery, University of Louisville. "The Surgical Treatment of Carcinoma of the Colon."

10:35 **Francis E. Senear, M.D., Chicago,** Professor and Head of Dept. of Dermatology, University of Illinois, College of Medicine. "Dermatitis Medicamentosa"

11:00 **Bayard Carter, M.D., Durham, N. Carolina.** Professor of Obstetrics and Gynecology, Duke University School of Medicine. "Premature Separation of Placenta."

Second General Assembly
Wednesday, September 25

Afternoon

P.M.

1:40 **Francis M. Rackemann, M.D., Boston,** Lecturer in Medicine, Harvard Medical School. "New Concepts of the Causes of Asthma."

2:05 **Leo Rigler, M.D., Minneapolis,** Professor of Radiology, University of Minnesota Medical School. "Early Diagnosis of Cancer of the Lung."

3:15 **Louis H. Clerf, M.D., Philadelphia,** Professor of Laryngology and Broncho-Esophagology, Jefferson Medical College. "The Clinical Significance of Hoarseness and Wheezing Respiration."

3:40 **S. Allen Wilkinson, M.D., Boston,** Member of Staff, Dept. of Gastro-Enterology, Lahey Clinic. "Diseases of the Liver and Jaundice."

4:15 Seven Discussion Conferences in Medicine, Surgery, Obstetrics, Dermatology, Radiology, Otolaryngology and General Practice.

Third General Assembly
Wednesday, September 25

Evening—Public Meeting

P.M.

8:30 OFFICERS' NIGHT. Presidential Address and Induction of New President.

Biddle Oration

C. F. Kettering, Vice President in Charge of Research, General Motors Corp. "Industrial Research and Medicine."

THE PROGRAM

Fourth General Assembly
Thursday, September 26

Morning

A.M.

9:00 **Richard B. Cattell, M.D., Boston,** Surgeon to Lahey Clinic, New England Deaconess and New England Baptist Hospitals. "Present Day Management of Ulcerative Colitis."

9:25 **Arthur H. Ruggles, M.D., Providence,** Superintendent, Butler Hospital. "The Development and Use of the Psychiatric Outpatient Department."

10:35 **Francis D. Murphy, M.D., Milwaukee,** Director, Department of Medicine, and Professor of Medicine, Marquette University, School of Medicine. "Hypertensive Heart Disease."

11:00 **Allan M. Butler, M.D., Boston,** Associate Professor of Medicine, Harvard Medical School. "Parenteral Fluid Therapy."

Fifth General Assembly
Thursday, September 26

Afternoon

P.M.

1:40 **George Crile, Jr., M.D., Cleveland,** Member, Surgical Staff, Cleveland Clinic Foundation. "The Present Status of Treatment of Diseases of the Thyroid."

2:05 **Ralph T. Knight, M.D., Minneapolis,** Clinical Professor and Director, Division of Anesthesiology, University of Minnesota. "Present Developments in Combined Anesthesia."

3:15 **Edmund B. Spaeth, M.D., Philadelphia,** Professor of Ophthamology and Vice-Dean for Ophthamology, University of Pennsylvania. "Ocular Fundus, Its Values in Diagnosis and in Prognosis."

3:40 **Nicholson J. Eastman, M.D., Baltimore,** Professor of Obstetrics, Johns Hopkins Hospital. "Episiotomy."

4:15 Seven Discussion Conferences in Medicine, Surgery, Pediatrics, Ophthalmology, Anesthesia, General Practice and Obstetrics.

Evening

State Society Night

10:00 Dancing for MSMS members and their ladies. Grand Ballroom, Book-Cadillac Hotel, Detroit.

THE PROGRAM

Sixth General Assembly
Friday, September 27

Morning

A.M.

9:00 **Emil Novak, M.D., Baltimore,** Asst. Professor of Gynecology, Johns Hopkins Medical School. "Significance and Treatment of Uterine Bleeding at Various Age Periods."

9:25 **T. Grier Miller, M.D., Philadelphia,** Professor of Clinical Medicine, University of Pennsylvania School of Medicine. "Results from the Management of Peptic Ulcer."

10:35 **H. E. Alexander, M.D., New York,** Asst. Professor of Pediatrics, College of Physicians and Surgeons, Columbia University. "Treatment of H. Influenzae Meningitis."

11:00 **Roscoe R. Graham, M.D., Toronto, Canada,** Assistant Professor of Surgery, University of Toronto, Faculty of Medicine. "Abdominal Emergencies in General Practice."

Seventh General Assembly
Friday, September 27

Afternoon

P.M.

1:40 **Charles R. Rein, M.D., New York,** Consultant in Serology, Army Medical School "Recent Advances in the Serodiagnosis of Syphilis."

2:05 **Philip Levine, M.D., Linden, N. J.,** Director, Biological Division, Ortho Research Foundation. "Importance of the Rh Factor in Clinical Medicine."

3:15 **E. H. Rynearson, M.D., M.S., FACP, Rochester, Minnesota,** Associate Professor of Medicine, Mayo Foundation, University of Minnesota. "Clinical Disturbances of the Endocrine Glands."

3:40 **Charles W. Mayo, M.D., Rochester, Minn.,** Associate Professor of Surgery, Mayo Foundation. "Operative Procedures for Carcinoma of the Rectum."

4:15 Five Discussion Conferences in Medicine, Surgery, Gynecology, Pediatrics and Syphilology.

General Assemblies and the Annual Session end at 5:15 p.m.

THE PROGRAM

Section Meetings

Wednesday, September 25, 12:00 noon to 1:30 p.m.

(luncheon meetings)

1. Radiology, Founders Room, Book-Cadillac Hotel
   Leo Rigler, M.D., Minneapolis, "Cholangiography and Biliary Regurgitation"

2. Dermatology, Washington Room, Book-Cadillac Hotel
   Francis E. Senear, M.D., Chicago, "Acute Disseminated Lupus Erythematosus—Its Diagnosis and Treatment."

3. Otolaryngology, Parlors G-H-I, Book-Cadillac Hotel
   Louis H. Clerf, M.D., Philadelphia, "Paralysis of the Larynx"

Thursday, September 26, 12:00 noon to 1:30 p.m.

(luncheon meetings)

4. General Practice, Grand Ballroom, Book-Cadillac Hotel
   Francis D. Murphy, M.D., Milwaukee, "Acute Nephritis"

5. Surgery, Washington Room, Book-Cadillac Hotel
   George Crile, Jr., M.D., Cleveland, "Surgical Diseases of the Pancreas and Lower Biliary Tract"

6. Ophthalmology, Parlors G H I, Book-Cadillac Hotel
   Edmund B. Spaeth, M.D., Philadelphia, "Vertical Component in Lateral Concomitant Strabismus."

7. Anesthesia, Parlor J, Book-Cadillac Hotel
   Ivan B. Taylor, M.D., Professor of Anesthesiology, Wayne University, College of Medicine, Detroit, "Discussion on Spinal Anesthesia"

Friday, September 27, 12:00 noon to 1:30 p.m.

(luncheon meetings)

8. Obstetrics and Gynecology, Washington Room, Book-Cadillac Hotel
   Emil Novak, M.D., Baltimore, "Functioning Tumors of the Ovary."

9. Medicine, Founders Room, Book-Cadillac Hotel
   Jerome W. Conn, M.D., Assoc. Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, "Functional Hyperinsulinism"

10. Pediatrics, Parlors G H I, Book-Cadillac Hotel
    Philip Levine, M.D., Linden, New Jersey, "The Basis for Specific Therapy of Erythroblastosis Fetalis"

Committee Reports

ANNUAL REPORT OF LEGISLATIVE COMMITTEE, 1945-46

During the year 1946, your Legislative Committee held no meeting.

An extra session of the Michigan Legislature was held early in 1946, but nothing of direct importance or concern to the medical profession was encountered in this session. The daily activities of the Legislature were watched carefully, but only legislation of a general nature was proposed.

The individual members of your Legislative Committee have co-ordinated with the American Medical Association and other national medical groups in recommending contacts with members of the United States Congress on various proposals affecting medicine and public health, and have done what they can in connection with proposals to socialize medicine.

Your Legislative Committee warns that a most determined effort may be made in the 1947 Michigan Legislature to place on the statutes of this state a compulsory state medicine or sickness insurance proposal, and urges that the individual practitioners of medicine cast aside any complacency or defeatist attitude, and assume in its place a militant, alert, and realistic approach to a very dangerous problem facing them.

The Committee wishes to report that, as in the past, it has received prompt and courteous consideration at the hands of our United States Senators and a plurality of our Congressmen from Michigan.

Respectfully submitted,
H. A. Miller, M.D., *Chairman*
R. G. Cook, M.D.
D. L. Finch, M.D.
Nicola Gigante, M.D.
T. K. Gruber, M.D.
W. A. Hyland, M.D.
E. D. King, M.D.
S. L. Loupee, M.D.
G. L. McClellan, M.D. (deceased)
H. L. Morris, M.D.
E. W. Schnoor, M.D.
E. F. Sladek, M.D.
R. V. Walker, M.D.
George Waters, M.D.
A. V. Wenger, M.D.

ANNUAL REPORT OF PROFESSIONAL LIAISON COMMITTEE, 1945-46

The Professional Liaison Committee had no meetings during 1945-46, as no matters or problems within the purview of this Committee's activities were referred to it.

Respectfully submitted,
W. F. Boughner, M.D., *Chairman*
J. A. Dorland, M.D.
R. A. Springer, M.D.

ANNUAL REPORT OF VENEREAL DISEASE CONTROL COMMITTEE, 1945-46

Two meetings of the Venereal Disease Control Committee have been held during the past year. The first meeting was held at the Porter Hotel in Lansing at 2:00 p.m. on Sunday, March 3, 1946. The second meeting was held at the same place and time on Sunday, May 26, 1946.

At the first meeting the problem of serodiagnosis of syphilis with special reference to false positive reactions was discussed. It was decided that a discussion of this subject should be prepared for publication in The Journal of the Michigan State Medical Society.

The problem of the indications for and the most effec-

tive use of penicillin in the treatment of syphilis was next discussed. It was decided that this should also be made the subject for a report to our medical profession through THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. The preparation of such an article on serologic interpretation was assigned to Doctor Shaffer and the article on "Penicillin Therapy of Syphilis" was assigned to Doctor Curtis.

Doctor Cummings reported that the Laboratory of the Michigan State Health Department was preparing to do Kolmer complement fixation tests on request as well as quantitative Kahn reactions.

Consultants to Doctor DeKleine, State Health Commissioner, for disposition of questionable cases, for whom applications for special dispensation certification for marriage are made, were discussed. A list of consultants was approved to represent their respective communities from the Lower Peninsula.

At the meeting of May 26, the articles of Doctors Shaffer and Curtis were reviewed, amended and approved. It was recommended that they be forwarded to the Editor of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for publication as feature articles in an early issue. It was also recommended that the State Health Department be contacted to secure reprints of these articles to be circulated to all physicians and health officers in Michigan.

Four physicians from the Upper Peninsula were recommended to be added to the list of consultants for Special Dispensation Certificates for Marriage. The completed list, when approved by The Council, Michigan State Medical Society, was to be forwarded to the State Health Commissioner for notification of appointment.

Respectfully submitted,
L. W. SHAFFER, M.D., *Chairman*
R. S. BREAKEY, M.D.
K. A. ALGORN, M.D.
A. C. CURTIS, M.D.
RUTH HERRICK, M.D.
H. L. KEIM, M.D.
L. M. MCKINLAY, M.D.
E. S. PARMENTER, M.D.

ANNUAL REPORT OF MSMS ETHICS COMMITTEE, 1945-46

Your Ethics Committee begs to report that it has had nothing to do whatever in the last year. This is very gratifying, especially in these times of stress and strain. We have had no complaints whatever.

Respectfully submitted,
H. W. PORTER, M.D., *Chairman*
A. J. BAKER, M.D.
L. O. GEIB, M.D.
L. C. HARVIE, M.D.
G. B. HOOPS, M.D.
E. T. MORDEN, M.D.
D. R. SMITH, M.D.
LEMOYNE SNYDER, M.D.

ANNUAL REPORT OF MENTAL HYGIENE COMMITTEE, 1945-46

The Mental Hygiene Committee had one meeting during the past year.

Only two subjects were referred to the Committee with the following action:

1. The matter referred to this Committee relative to the Veterans' Readjustment Center at Ann Arbor was considered. It is our understanding that this Center will be conducted after the same policy as has been in existence relative to patients who have been admitted to the University Hospital proper, with the addition of being used as a training center for doctors who wish to enter the specialty field of psychiatry.

It is understood that those doctors in attendance will spend one year at the Center and then are obligated to join the staff of a State Hospital for another year for further training. It appears that this plan will contribute materially to the solving of the problem of the shortage of qualified psychiatrists in the State of Michigan.

Your Committee approved to The Council the conduct of the Center as outlined by the Board of Regents.

2. Your Committee approved and so recommended to The Council that the American Epilepsy League of Boston be informed of the approval of the Michigan State Medical Society for distribution to physicians of available literature regarding epilepsy in its various forms.

Respectfully submitted,
H. A. LUCE, M.D., *Chairman*
R. G. BRAIN, M.D.
F. P. CURRIER, M.D.
M. H. HOFFMANN, M.D.
R. A. MORTER, M.D.
H. A. REYE, M.D.
R. W. WAGGONER, M.D.
O. R. YODER, M.D.

ANNUAL REPORT OF MSMS COMMITTEE ON HEART AND DEGERATIVE DISEASES 1945-46

No meetings of the Heart and Degenerative Diseases Committee were held during the year, the activities of the members being confined to promotion of a statewide Rheumatic Fever Control Program.

The present Chairman recommends that the Committee be continued since there are a number of activities of importance to both public and profession yet to be consummated.

Respectfully submitted,
H. H. RIECKER, M.D., *Chairman*
B. B. BUSHONG, M.D.
M. S. CHAMBERS, M.D.
R. A. JOHNSON, M.D.
MARK MARSHALL, M.D.
A. E. VOEGELIN, M.D.

ANNUAL REPORT OF THE MSMS CHILD WELFARE COMMITTEE, 1945-46

The Child Welfare Committee of the Michigan State Medical Society has had one meeting this year at which time three problems were discussed:

1. Infectious or epidemic diarrhoea in children both in the newborn period and later. The Committee felt that the problem was a joint one with the Maternal Health Committee and voted to invite that Committee, along with Dr. Cummings of the State Department of Health Laboratories, to study jointly the situation and bring back suggestions as to etiology, management and therapy. The Maternal Health Committee has appointed Ward F. Seeley, M.D. and Harold Henderson, M.D.; Dr. G. D. Cummings has accepted appointment and the Child Health Committee representatives are Rockwell Kempton, M.D., and Campbell Harvey, M.D.

2. Immunization problems. It was felt that sufficient data had not accumulated to justify any changes in the present schedules as are now being distributed by the Department of Health.

3. Study of Child Health Services. After full discussion the Committee voted to request The Council's permission to associate itself with the Survey of Child Health Services as being conducted by the American Academy of Pediatrics. This request was granted by The Council and $1,000 was made available to help defray the expenses of this Survey in Michigan. In brief, this is a Survey started by the Academy of Pediatrics directed at obtaining factual data concerning the facilities for child health throughout the nation. It begins with educational facilities in our universities and colleges, and includes hospital training for interns and residents as well as facilities for the direct care of chil-

dren. It attempts to find out the quality and quantity of care rendered by physicians and the various public health facilities available in each community. It really is a quantitative and qualitative evaluation of the services available to children, conducted by physicians and for the benefit of all. The idea could have started in Michigan, and as a matter of fact the seeds may have been sown here, for the enabling motion was made by the Academy in St. Louis in November 1944 after the Pediatricians became thoroughly aware of the implication in the EMIC program.

The Survey is in detail and will take about six months to complete. It has been estimated that about 45,000 pieces of mail will go out of the State Chairman's office.

The Committee wishes to express its appreciation to The Council for allowing our participation in this activity.

Respectfully submitted,
FRANK VAN SCHOICK, M.D., *Chairman*
R. M. KEMPTON, M.D.
MOSES COOPERSTOCK, M.D.
CARLETON DEAN, M.D.
CAMPBELL HARVEY, M.D.
J. L. LAW, M.D.
CLARICE MCDOUGALL, M.D.
A. L. RICHARDSON, M.D.
L. P. SONDA, M.D.

ANNUAL REPORT OF SPECIAL COMMITTEE ON RADIO, 1945-46

Your Special Committee on Radio has held ten meetings and spent many hours on the radio program.

In an effort to improve the program and to meet the then current criticisms of members of the Council and others, your committee made some drastic changes as of March 1, 1946. These changes ware approved by the Executive Committee of the Council. The entire format of the program was changed, and transcribed music was substituted for the live talent previously used. The contract with WJR was terminated and arrangements were made for the new program to be broadcast over WXYZ in Detroit and over the Michigan network throughout the state.

Whether or not these changes were wise is problematical. Criticisms have continued. Judged by a survey made in Detroit May 21, 1946, the popularity of this program had dropped to 2.7 as compared with 9.6 for the previous program. This survey does not take into account the out-state listening audience. Both surveys were made by Commercial Services Incorporated.

The future of the radio program is a matter to be determined by the House of Delegates.

Respectfully submitted,
C. L. CANDLER, M.D., *Chairman*
A. S. BRUNK, M.D.
P. L. LEDWIDGE, M.D.

ANNUAL REPORT OF PUBLIC RELATIONS COMMITTEE 1945-46

The program of this Committee was planned, not as a complete entity, but as a groundwork for a more comprehensive extension of public relations activities by the State Society, by the Public Relations Counselor, and on a local level by the county society. Part of the program is aimed on an institutional level for long term effect; part is more direct for immediate effect.

In formulating a public relations policy and program, the Committee had the advice of two Past Presidents, Dr. Keyport and Dr. Brunk; and of President Morrish; and of Speaker Ledwidge, and of several members of The Council who devoted much time and gave valuable aid.

Various means of improving our relations with the public were investigated. A weekly scientific newspaper column was ratified, set up, then cancelled in favor of more direct means of advertising. The Michigan Health Council, the Legislative Committee, the Committee on the Development of Literature of the MSMS, all contributed to the 1945-46 Public Relations program.

As the opening move, a public relations conference was held in Lansing attended by Public Relations Committee Chairmen from County Societies and by other doctors interested in actively working in the public relations program. Instructions, coaching, ideas, and individual counseling were given these men and they have since performed good service in carrying the program on in their respective counties.

The following fields were covered as part of the public relations work:

1. The Public platform.—To stimulate better representation, and more representation of the medical profession on the platform before lay groups, a speakers' bureau was formed; county speakers' bureaus were appointed by county society presidents. Many speaking engagements were arranged by these bureaus. A speakers' kit, containing information on current legislation and its implications, was sent to each member of the speakers' organization. At the February 21 conference, staged in Lansing, this material was given a thorough demonstration as to manner of presentation and preparation. This committee feels that this field offers great potentialities, with stress on the necessity of each county society operating its own bureau, with the county society secretary making speaking engagements and the members of the speakers' bureau filling them, particularly before small lay groups, such as P.T.A.s, Women's Organizations, and Service Groups.

2. Newspaper Advertising.—This field of public relations was considered valuable, although hitherto unused by the MSMS. It was felt that advertising, judiciously placed, would result not only in value received from the ads themselves, but also in the promotion of better relations with the press as a whole. Funds this year did not permit an extensive program. However, a series of twelve ads was prepared in the executive office with art work and layouts done through the Michigan Health Council. The first ad was run in some eighty newspapers of the state and was paid for by the MSMS, but placed through the county societies and carried their name. Succeeding ads were sent to the county society secretaries, and the problem of paying for them allocated to the county societies. In some counties this cost was met from the society treasury; in some, individual physicians and dentists paid for individual ads; in some, the allied professions and various businessmen participated in the cost. With a relatively small sum spent by the MSMS from the public relations budget, a total sum of ten times that amount in newspaper advertising will have been spent for the insertion of these ads in weekly and daily newspapers before Jan. 1, 1947. It is difficult to estimate the value of these ads, just as it is with any type of advertising, but it is felt by this committee that this medium should be studied, that it will have definite benefits in improving public relations through a better press and that if the studies indicate, its use should be extended in 1946-47.

3. Schools.—A series of fifteen-minute programs on recording discs with accompanying health charts, is being prepared for presentation through the public schools. There will be at least three programs which will be presented in the majority of the schools throughout the State. Other health organizations have been contacted and may join us in this endeavor to reach the school children through this modern and effective means. This program will be used beginning in September with the opening of the new school year.

4. Radio.—Under the direction of the Special Committee on Radio, a program was carried on. Report of this committee appears separately.

5. Pamphlets.—Two committees worked on the pamphlet program. One of these was the Committee on the Development of Literature, the other was the Committee on the Distribution of Literature. The first committee has prepared and approved six pamphlets for distribution to doctors and to the laity. The first two pamphlets printed were the pamphlets of the "Little Joe Genius" series. One hundred thousand of each of these were printed and the second committee had these placed in the various doctors' waiting rooms throughout the state by first distributing them to the county secretaries. These were also distributed to hospitals for their waiting rooms through the efforts of the Michigan Health Council. Other pamphlets of this series have been written and are being prepared for distribution. The other pamphlets were prepared, one for distribution to the doctors for their own consumption, and the others to the doctors for redistribution to laity of a professional standard. A pamphlet, the first in a series of six to be prepared, printed and paid for by the MHS, MMS, and the Michigan Health Council, has been written and approved by these committees.

6. Co-ordination of All Public Relations in the State.—It was recognized in the first meeting of the committee that no comprehensive program could be carried out singlehandedly by the thirteen members of this committee. Each county society president was therefore encouraged to appoint a public relations committee in his county society to supervise: (1) local public relations. (2) local newspaper advertising. (3) local activities of the county speakers' bureau. Some county society presidents responded at once; some took no action. There were thirty-three county societies' public relations committees functioning on June 1, 1946, and seventeen speakers' bureaus operating.

7. Other 1946 Public Relations Activities.—Inter-professional liaison meetings of doctors of medicine, doctors of dental surgery, pharmacists and other allied professions were held to discuss questions of paramount importance affecting all.

Various locally sponsored radio broadcasts stressing prepayment health insurance on a voluntary basis were made under the aegis of businessmen with the State Society supplying information and radio commercials.

The newspapers of the state have been sent news releases on matters pertaining to the medical profession and to political medicine, which were printed in newspapers throughout the State.

A propaganda effort is currently being made featuring the IDWTGTRMB Club. This effort may extend not only statewide among the doctors, but also among the businessmen and doctors throughout the United States. It consists of the organization of a club whose purpose is to feature the thought which is embodied in its name, the I Don't Want The Government To Run My Business Club, and carried with it the message of opposition to political medicine.

Posters consisting of blow-ups of the ads prepared for the newspapers have been sent to doctors throughout the State for them to place in public places. These have also been sent to various other organizations with the request that they be posted.

In connection with the work of the Public Relations Committee, Mr. Hugh Brenneman, MSMS Public Relations Counsel, has implemented the decisions of the Committee in the various fields in which it has entered.

Recommendations for 1946-47

This committee recommends:

1. That each Councilor District be represented on the membership of this committee.

2. That each county society president select a dynamic public relations committee to foster and stimulate effective use of the public relations media; to call to the attention of the society, means of improving the personal patient-physician relationship and to relay recommendations of the county society to the state society of ways and means in which the state society can aid them in their local problems and also to advise the state committee with constructive criticism of the state program. Such reaction *from the membership* is felt to be of utmost importance for successful public relations. The promptness of such criticism enhances its value.

3. That county societies issuing monthly bulletins devote space in each issue to public relations plans and problems.

4. That the special assessment of twenty-five dollars for 1945-46 for public relations be repeated or increased in 1946-47 to provide for continuance and expansion of this important and previously neglected field.

Respectfully submitted,
J. S. DeTar, M.D., *Chairman*
C. L. Candler, M.D., *Vice Chairman*
A. S. Brunk, M.D.
C. R. Keyport, M.D.
C. L. Weston, M.D.
N. J. Frenn, M.D.
L. T. Henderson, M.D.
W. J. Herrington, M.D.
S. W. Insley, M.D.
P. L. Ledwidge, M.D.
J. J. McCann, M.D.
G. B. Saltonstall, M.D.
G. A. Zindler, M.D.

ANNUAL REPORT OF IODIZED SALT COMMITTEE, 1945-46

The committee did not have a formal meeting during the year.

However, we did send a scout, Dr. Brock Brush, to represent us at the meeting of the National Committee on January 23, 1946, in Cleveland. That meeting was presided over by its chairman, Dr. Haven Emerson. While Dr. Miner was still chairman of our state committee, we had a meeting in Detroit with the National Committee at the Detroit Club. It was agreed at that time by our State Committee, as well as by the National Committee, that there can be no doubt whatsoever of the great need of iodine in the diet for people living in the endemic goitre areas, such as around the Great Lakes.

Also, there was no disagreement as to the dosage of iodine to meet minimal requirements. There was no question of any harm resulting from the amount of iodine now placed in our table salt. While Dr. Cowie was still chairman of our State Committee, we investigated every case which was suspected of having been harmed by iodized salt reported in this state, and Dr. Cowie never found the slightest evidence that anyone has been harmed by this amount of iodine.

We know that under the Federal Pure Food Laws, we cannot use the iodine in the salt without so labeling the salt. Therefore, our Michigan Committee has in the past, as I believe they do today, felt that we must co-operate in every way with the National Committee on goitre prevention in establishing a national scheme or law for making legal the use of iodine in salt throughout the United States.

The following two paragraphs are from Dr. Brush's report of the National Committee meeting in Cleveland:

"The meeting of the National Committee on Goiter Prevention was held in Cleveland on January 23, 1946. The purpose of this meeting was to prevail on the Federal authorities to some way establish the use of iodized salt throughout the United States. The meeting was represented by the American Medical Association, the American Public Health Association, the Federal Public Health, and the Federal Department of Pure Foods and Drugs, and the salt companies.

"The morning session was composed of talks by Dr. Kimball about his work on goiter prevention, and by Dr. George Curtis of Columbus, Ohio, on his work on

iodine requirements, and we reported on our experience in Michigan. In the afternoon, steps by which federal legislation to guarantee the use of iodized salt throughout the United States were discussed, and several resolutions adopted. A full report of this meeting will appear in the *Journal of the American Public Health Association* in the near future."

Dr. Brush and I have during the past few years been preparing a follow-up report on my paper of twenty years ago on the Reduction of Thyroid Operation in Seven Large Hospitals in Southern Michigan following the Introduction of Iodized Salt. This will be published shortly.

Respectfully submitted,
R. D. McClure, M.D., *Chairman*
L. M. Bogart, M.D.
L. W. Gerstner, M.D.
D. E. Lichty, M.D.
R. J. Moehlig, M.D.

ANNUAL REPORT OF COMMITTEE ON TUBERCULOSIS CONTROL, 1945-46

1. The committee regrets the loss of its Chairman, Dr. John B. Barnwell, who assumed the Office of Director of Tuberculosis of the Veterans Administration in January of this year. The committee congratulates the Veterans Administration for their selection of so able a physician in the field of tuberculosis.

2. In a special session of the Michigan Legislature, the legislature demonstrated its continued interest in the control of tuberculosis. The sum of $500,000 was appropriated for a new State Sanatorium at Houghton. The committee has previously urged the need of a new institution adequate for the care of tuberculosis in this particular area. The legislature also increased State subsidy to certain counties carrying large hospital loads in relation to their assessed valuation. Under this new Act, counties will receive subsidy up to four dollars per day where the hospital load for tuberculosis exceeds twenty hospital days per $100,000 of assessed valuation.

This Act affects, principally, counties in the Upper Peninsula and the northern tier of counties in the lower peninsula. The total cost to the state is small in comparison to the total subsidy, but this money is essential to these counties if they are to care adequately for their tuberculosis problem.

3. During the past year a number of Health Agencies in the Sanatoria of Michigan profited through federal grants set up to aid in the fight on tuberculosis. These grants will become increasingly helpful in augmenting services chiefly in the fields of case finding and rehabilitation.

4. Tuberculosis among discharged veterans is already becoming a problem. X-ray examination at separation centers are screening out a large number of active cases. Many of these active cases are finding their way back into our local communities, where so often they become a serious public health menace.

Cash benefits for our tuberculous are, as of this date, set up on such a basis as to discourage a large percentage of these veterans in seeking hospital care.

The physicians of our state could do much to educate and encourage these veterans as to the proper management of their disease.

5. In connection with x-ray case finding programs throughout the state, it is urged that all doctors will encourage these surveys and help organize them in their own territory.

Respectfully submitted,
J. W. Towey, M.D., *Chairman*
J. L. Egle, M.D.
L. E. Holly, M.D.
W. L. Howard, M.D.
W. B. Howes, M.D.
H. G. Huntington, M.D.
V. C. Johnson, M.D.
J. D. Littig, M.D.
E. J. O'Brien, M.D.

ANNUAL REPORT OF SCIENTIFIC RADIO COMMITTEE—1945-46

The Scientific Radio Program is sponsored by the Michigan State Medical Society and the University of Michigan continued for the year 1945-46 very much on the same schedule as before with a total of forty-two talks being broadcast from October, 1945, through July, 1946. As in the past, WJR has allocated the time from 11:15 to 11:30 o'clock P.M. every Thursday evening for this program and this was given without pay. Speakers were obtained principally from the University of Michigan Medical School faculty, but various talks were given by members of the profession in different parts of the State. The subject matter, as well as the contents of material presented, was discussed by both the Preventive Medicine Committee and the Special Radio Committee. Suggestions were made for broadcasting the subject matter, but in general it was agreed that the radio talks were being well received and should be continued.

Respectfully submitted,
H. M. Pollard, M.D., *Chairman*
J. H. McMillin, M.D.
E. W. Meredith, M.D.
F. R. Reed, M.D.
G. M. Waldie, M.D.
F. A. Weiser, M.D.
L. J. Morand, M.D.

ANNUAL REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH, 1945-46

Due to conflicting dates with other meetings, the annual meeting sponsored by the Committee on Industrial Health of the Michigan State Medical Society was not held in April of this year as it has been for the past three years.

In order to co-operate with local medical societies, a new type of meeting has been inaugurated. The first in a series of this type of meeting was held in Bay City on June 5, 1946. The meeting was sponsored by the Committee on Industrial Health of the Michigan State Medical Society in co-operation with the District Medical Society consisting of Bay, Arenac and Iosco counties. The Bay City Chevrolet Division of the General Motors Corporation served as host. Those attending were guests of the Chevrolet management at a social hour and banquet held at the Wenonah Hotel following the plant tour. The program consisted of a few short talks and the presentation of the General Motors' film entitled "Doctor in Industry." This is an excellent film depicting the development and scope of industrial medicine prior to the first World War to the present time. The running time of the film is fifty-five minutes. The attendance was fifty-seven, or approximately eighty per cent of the membership of the medical society. During the plant tour the doctors were divided into groups of five. A plant representative accompanied each group, pointing out the various production methods and the means used to control the various types of occupational health hazards. The entire group was very pleased and expressed a desire for the continuation of this type of meeting.

Plans are now being made to hold similar meetings in Flint, Grand Rapids, Lansing, Pontiac and Saginaw. The purpose of these meetings is to create a more thorough knowledge of the problems of industrial medicine and to bring about a better understanding between the industrial physician and private practitioners in their mutual problems. The plant visits, other than being very interesting from a production viewpoint, have the added advantage of showing and explaining the various

preventive measures that are taken by industry to safeguard the health of its employes.

Respectfully submitted,
K. E. Markuson, M.D., *Chairman*
H. H. Gay, M.D., *Vice Chairman*
A. L. Brooks, M.D.
W. P. Chester, M.D.
Henry Cook, M.D.
W. A. Dawson, M.D.
W. B. Harm, M.D.
J. E. Livesay, M.D.
F. T. McCormick, M.D.
C. D. Selby, M.D.
H. T. Sethney, M.D.
E. C. Sites, M.D.
F. B. Williamson, M.D.

ANNUAL REPORT OF COMMITTEE ON NURSES TRAINING SCHOOLS, 1945-46

The Committee held no meetings during the past year.

The main objective of the Committee, that more nursing service, especially in the smaller hospitals, be made available, still is to be attained. We recommend the Committee be continued and it is hoped some tangible accomplishments may be made this coming year.

Respectfully submitted,
E. A. Oakes, M.D., *Chairman*
A. L. Arnold, Jr., M.D.
C. G. Clippert, M.D.
A. E. Stickley, M.D.
D. W. Thorup, M.D.

ANNUAL REPORT OF MICHIGAN FOUNDATION COMMITTEE, 1945-46

The Committee was called together in Lansing, February 6, 1946, with the Board of Trustees of the Foundation. The principal business confronting the Committee concerned the furtherance of the creation of a substantial fund and methods required to accomplish this. Discussion led to conclusions to utilize the organizations already formed and to make new appeals to them. The Committee agreed upon the permanency of the funds with broad aims for the future and upon a policy to keep the principal of the funds intact and to use only the income from the funds for needed expenditures except when a donor might explicitly direct otherwise.

The need for a statewide campaign to interest donors of gifts of $1,000 or more was met by suggesting that the Board of Trustees of the Foundation request the Chairman of the MSMS Council to urge the individual Councilors of MSMS to make direct contacts or to make appointments in each county district for the purpose of arousing interest among Doctors of Medicine to become Founders of the Michigan Foundation for Medical and Health Education. The President of the Foundation was also requested to approach those already in the Founder's group to arouse interest among their friends who are able to become Founders.

The need of a statewide campaign for gifts of less than $1,000 was met by appealing again to the already formed large statewide committee consisting of all members of the MSMS House of Delegates, to all Presidents and to all Secretaries of every county medical society in the State, and that this Committee, collectively and as individuals, renew its activities as sponsors and solicit gifts for the Foundation.

A mass of material for a proposed brochure setting forth the history of events which had led to the creation of the Michigan Foundation was presented by the Chairman of the Committee and the President of the Foundation. This material had been collected and formulated in an effort to disclose clearly that the work and purposes of the Foundation were the culmination of many activities and developments of and by the Michigan State Medical Society. The desirability of employing professionals for the editing and styling of the brochure was generally regarded as appropriate and necessary.

Tangible projects and other ideas for the brochure were requested to be returned by letter to the President of the Foundation as material from which to formulate the brochure.

The Committee is certain that the growth and development of funds for the Foundation are just as dependent upon the active interest of individuals, committees, and officers of the Michigan State Medical Society as is the concurrence in the projects to be adopted and sponsored. A whole-hearted and complete backing of the Foundation must be conspicuously manifest to whet interest and enthusiasm for large support outside the "Profession."

We are greatly saddened by the death of a member of our Committee, one who was also a member of the Board of Trustees of the Foundation. He had also served on the Committee which organized the Foundation. His experience and wisdom made him a valued member and his counsel was a great influence. Doctor Rollin H. Stevens was important in the Michigan Foundation for Medical and Health Education.

Respectfully submitted,
E. I. Carr, M.D., *Chairman*
J. D. Bruce, M.D.
A. S. Brunk, M.D.
B. R. Corbus, M.D.
C. V. Costello, M.D.
L. J. Hirschman, M.D.
R. L. Mustard, M.D.
Lawrence Reynolds, M.D.
J. M. Robb, M.D.

ANNUAL REPORT OF MEDICAL LEGAL COMMITTEE, 1945-46

No meeting of the Medical Legal Committee was held during the past year. For several years now, this Committee has acted in an advisory capacity only and most of its activities are carried on by correspondence with the Executive Secretary of the Michigan State Medical Society.

During the past year, the Chairman of the Committee has consulted personally, by telephone, or by letter, with physicians who have been threatened with malpractice suits. We have also been consulted about the various types of insurance and the amount of coverage deemed advisable.

At this time it seems to be imperative that this Committee urge each and every member to check over his present policy in order to determine whether or not he is sufficiently covered in the event a suit is brought against him. If he owns or operates an x-ray machine either for diagnosis or therapy or both; if he owns or rents radium; has employed an assistant; entered into a partnership or has taken a position as an assistant, he should not assume that he is fully covered. It is also urged that those members not having any insurance avail themselves of such protection at this time.

In the Committee report of 1944-45, attention was called to points considered important in malpractice prophylaxis and these will not be reiterated at this time. However, the past year has shown that malpractice insurance rates have risen in some states due to the fact that the increasing number of suits has raised the cost to the companies for such protection.

In order that rates may not be increased in Michigan, it is essential that all physicians keep careful records, avoid counter suits against unpaid bills, and keep in mind that each dissatisfied patient is a potential suit.

In order that the officers of the Society have an overall knowledge of the malpractice situation in this State, it is requested that each physician threatened with a suit communicate at once with the Executive Secretary or the Chairman of the Medical Legal Committee and

notify them if and when the suit was dropped, settled or brought into court.

Respectfully submitted,
S. W. Donaldson, M.D., *Chairman*
F. A. Mercer, M.D.
W. B. Mitchell, M.D.
W. J. Stapleton, Jr., M.D.

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE, 1945-46

Since the purchase of the Early House by Parke-Davis and Company and their generous presentation of it to the State Park Commission, the main objective of our Committee has been attained. On behalf of the Committee, I have written to the Park Commission telling them of our interest in the Early House and offering to aid them in any possible way by consultation or advice.

Now that the main objectives of the Committee have been met, we recommend it be retired.

Respectfully submitted,
F. A. Coller, M.D., *Chairman*
A. W. McDonald, M.D.
F. C. Kidner, M.D.
A. W. Lescohier, M.D.
H. C. Mayne, M.D.

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE, 1945-46

The Maternal Health Committee, during the past year, has made further studies concerning the planned program for a maternal mortality study throughout the state, and we expect, in the near future, to make known the complete plan.

A sub-committee, consisting of Doctors Harold Henderson and W. F. Seeley, has been appointed to work with the Child Welfare Committee on the problem of infant diarrhea.

Respectfully submitted,
A. E. Catherwood, M.D., *Chairman*
Harold Henderson, M.D.
W. G. Hoebeke, M.D.
S. T. Lowe, M.D.
W. F. Seeley, M.D.
P. E. Sutton, M.D.
A. M. Campbell, M.D., *(Advisor)*

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1945-46

With the trend of activities away from the makeshift of wartime, the medical profession at least has headed towards more stable long-range objectives. Your Preventive Medicine Committee and its advisory sections have accordingly been called upon to deal both with problems arising out of war conditions and those that have necessarily been tabled for the past several years.

One of the most urgent questions demanding an answer has been that of falsely positive serology, accentuated by malaria, infectious diseases and immunization procedures. The Venereal Disease Control Committee has conducted an extensive investigation of this problem and the results of its efforts are even now becoming manifest in the increased facilities being made available for more accurate and informative serologic procedures.

Development of a system for following up the 5,000 to 7,000 army induction system rejections for heart disease has been delegated to the Rheumatic Fever Control Committee which, with the co-operation of the State Health Department, will soon have its nine centers at work on this problem in their individual districts.

This year's conference on Industrial Health was passed up mainly because of the epidemic of strike-illness which was outside of the medical domain. However, it is planned to resume these worth-while sessions as soon as opportunity permits.

The Iodized Salt Committee has again taken up the cudgels in behalf of a more widespread use of iodized salt. It seems that conflicting opinion on the part of government agencies and manufacturers as to the proper and definitive labeling, and a lagging interest on the part of the public, has reduced the use of iodized table salt by one-half—a shameful neglect of a highly beneficial preventive measure. The Committee is attacking this problem vigorously and we hope soon to see an upward trend in the consumption of iodized salt.

The Committee on Mental Hygiene is involved in the establishment of veterans' readjustment centers. The Child Welfare Committee is investigating the problem of infectious enteritis. It is also aiding the conduct of the statewide survey sponsored by the American Academy of Pediatrics. The Cancer Control Committee is following out its previously laid plans for better education in the detection and treatment of cancer. The Scientific Radio Committee has completed a comprehensive educational program of high calibre which has been well received by a large audience.

In all of these endeavors the full co-operation of the State Health Department under Commissioner Dr. William DeKleine has been constantly available and ever helpful.

Respectfully submitted,
W. S. Reveno, M.D., *Chairman*
A. E. Catherwood, M.D.
B. R. Corbus, M.D.
H. H. Cummings, M.D.
William DeKleine, M.D.
W. A. Hyland, M.D.
W. A. LeMire, M.D.
H. A. Luce, M.D.
K. E. Markuson, M.D.
H. M. Pollard, M.D.
H. H. Riecker, M.D.
L. W. Shaffer, M.D.
J. W. Towey, M.D.
Frank Van Schoick, M.D.

ANNUAL REPORT OF JOINT COMMITTEE WITH STATE BAR OF MICHIGAN ON VENEREAL DISEASE CONTROL, 1945-46

There have been no formal meetings of this Committee during the year prior to the necessary submission of this report. A meeting is anticipated in August, 1946, concerning which an amended report will be given at the annual meeting of the House of Delegates. Informal discussions concerning the unsettled suit against Dr. L. W. Shaffer and the Detroit City Health Department have been held. The nature of this suit is as published in the last annual report and the importance of the nature of the decision cannot be underestimated in view of the establishment of legal precedent with regard to the examination of reported sources of infection or contacts. An adverse decision would go far to nullify the many advances made from an epidemiologic view. It has been reported that the Corporation Counsel of the City of Detroit has appeared apathetic as regards this matter. It is the purpose of the Committee to meet with the members of the Bar Association later this summer in order to stimulate legal feeling and opinion in this matter. It has been felt that the matter is one of public health importance and that the Health Department of the City of Detroit should carry the matter to higher courts in case of an adverse decision.

Respectfully submitted,
R. S. Breakey, M.D., *Chairman*
L. W. Shaffer, M.D.
H. L. Keim, M.D.

— Technical Exhibits —

Abbott Laboratories **Booth No. 35**
North Chicago, Illinois

Mr. E. B. Webb and other Abbott representatives will be glad to discuss with you the war-born and newer products on display.
Amethone, the new urinary antispasmodic, Thiouracil (Abbott), for the preoperative preparation of Thyrotoxic patients, Tridione, of value in Epilepsy, and other new items merit your attention.

SO! BE SURE TO VISIT BOOTH 35

A. S. Aloe Company **Booth No. 15**
St. Louis, Missouri

The A. S. Aloe Company in Booth 15, is exhibiting a small cross section of its complete line of surgical, physio-therapy and laboratory equipment. Our representative, Mr. T. T. Boufford, is in charge of the booth.

Ames Company, Inc. **Booth No. 22**
Elkhart, Indiana

Ames Company, Inc. and its Reidel—de Haen Division cordially invite you to Booth No. 22 where modern test methods for urine-sugar, albumin, acetone and occult blood will be demonstrated; and our representatives will be glad to discuss the wide therapeutic advantages of the original hydro-choleretic, Decholin.

The Baker Laboratories **Booth No. 9**
Cleveland, Ohio

In the Baker exhibit you will see a line of infant foods that incorporates the newer trends and more recent thinking in infant nutrition. Both Baker's Modified Milk and Melcose are complete milk formulas, and completely prepared. Melodex (maltose and dextrin) is an economical carbohydrate in dry form and is made especially for use in preparing evaporated or fresh milk formulas in the home.

Bard-Parker Company, Inc. **Booth No. 31**
Danbury, Connecticut

Products to be displayed: Bard-Parker Rib-Back surgical blades; Surgical knife handles; Long handles for deep surgery; Bard-Parker Germicide; Instrument containers; Transfer forceps; Hematological case for obtaining bedside blood samples.

Barry Allergy Laboratories, Inc. **Booth No. 55**
Detroit, Michigan

Welcome Again MSMS to our Exhibit. We are proud to present new items in Sterile Injectable Solutions in Ampuls and Vials. New diagnostic scratch and intra-dermal sets with treatment service. Special allergists supplies. Scientifically organized Allergy Service. Hay Fever and Poison Ivy Sumac Sets. Pollen-Paks. Refined Protiens and Allergenic Extracts.

Becton, Dickinson & Company **Booth No. 34**
Ruthterford, New Jersey

The complete line of Vacutainer equipment, including all sizes of tubes available, will be the leading feature at Becton, Dickinson's booth. Their representatives, Mr. C. H. Yocum, Mr. V. R. Littlefield, and Mr. T. W. Starling, will demonstrate this new method of taking blood specimens for all purposes. In addition, hypodermic equipment, including recently developed outfits for continuous caudal and spinal anesthesia, will be displayed.

The Borden Company **Booth No. 32**
New York, New York

Spend a few minutes with Borden at Booth No. 32 . . . refresh your memory on our Prescription Products. Meet the new concentrated Biolac; New Improved Dryco with its formula flexibility; Mull-Soy for your milk-allergic patients; powdered whole milk Klim; the improved milk sugar, Beta Lactose; and the Merrell-Soule Protein and Lactic Acid Milks. Borden men are pleasant men!

Burroughs Wellcome & Co. (U.S.A.) Inc. **Booth No. 26**
New York, New York



BURROUGHS WELLCOME & CO., (U.S.A.) INC., NEW YORK, cordially invite physicians to their exhibit of a representative group of fine pharmaceuticals and chemicals. Of particular interest are GLOBIN INSULIN, a new advance in diabetic control; DIGOXIN, a pure, stable, crystalline glycoside of Digitalis lanata, combining constant, uniform potency with rapidity of action; and "DEXIN" High Dextrin Carbohydrate, the milk modifier in which the non-fermentable portion predominates; and "LUBAFAX" Brand Surgical Lubricant, one of our latest preparations.

Camel Cigarettes **Booth No. 67**
New York, New York

CAMEL Cigarettes will exhibit a large detailed photograph showing the calculated absorption of nicotine from cigarette smoke in the human respiratory tract. Representatives will be on hand to discuss any phase of the physiological effects of smoking.

Cameron Heartometer Company **Booth No. 14**
Chicago, Illinois

THE CAMERON HEARTOMETER COMPANY is showing the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressure. It also furnishes a permanent graphic record of the pulse rate, the nervous functioning of the heart, the myocardial response, as well as the functioning of the valves. The Heartometer clearly reveals heart disturbances in both early and advanced stages and is of great value in checking the progress of medication and treatments.

Cameron Surgical Specialty Company **Booth No. 53**
Chicago, Illinois

CAMERON SURGICAL SPECIALTY COMPANY See the new Cameron Electro-Surgical Units, Flexible Gastroscopes, Coagulair-Sigmoidoscope, Electro-Diagnostosets, Bronchoscopes — Esophagoscopes — Laryngoscopes, Mirrolite, Binocular Prism Loupe, Magniscope and other specialties developed for your postwar diagnosis, treatment and surgery. All products available for prompt delivery.

Carnation Company **Booth No. 39**
Milwaukee, Wisconsin

You are invited to visit the Carnation Company booth, No. 39, where you will see an attractive display presenting some interesting information on the various uses of Carnation Vitamin D Evaporated Milk for infant feeding, child feeding, and general diet pur-

poses. The method by which Carnation Milk is generously fortified with Vitamin D—400 U.S.P. Units per reconstituted quart—will be explained. Valuable literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc. **Booth No. 20**
Summit, New Jersey

Ciba invites you to visit its display at booth No. 20. Among products exhibited will be PRIVINE HCl, an effective, long-acting nasal vasoconstrictor; METANDREN Linguets, the potent androgen, methyltestosterone, for sublingual administration; TRASENTINE, TRASENTINE-PHENOBARBITAL and other products.
Our representatives in attendance will be glad to answer your questions.

Cottrell-Clarke, Inc. **Booth No. 78**
Detroit, Michigan

Davis & Geck, Inc. **Booth No. 61**
Brooklyn, New York

"This One Thing We Do"
10 Sutures

Davis & Geck, Inc., manufacturer of surgical sutures exclusively, will display a line of sutures and suture-needle combinations applicable to every technique and filling the requirements of every surgical situation. These will consist of D&G Thermo-flex and Claustro-Thermal catgut as well as non-absorbable sutures including D&G Dermalon, Surgilon, Anacap silk, Surgaloy metallic sutures and others. Motion pictures from the Surgical Film Library will be shown in Booth No. 61. Several new subjects will be presented. The company will be represented by Mr. Fred Geck and Mr. Merle Elliott.

Detroit Creamery Company **Booth No. 77**
Detroit, Michigan

NATIONAL DAIRY Sealtest PRODUCTS CORP.

This year's Sealtest exhibit stresses the development of its field force of inspectors.
National Dairy's red Sealtest symbol is found on milk and other milk products. The complex system of inspection, the detail work and research behind it, are all part of a larger program to perfect and improve milk in whatever form it reaches you, wherever you live.

Doho Chemical Corporation **Booth No. 33**
New York, New York

The Makers of "AURALGAN" are introducing at this Meeting their new sulfa drug preparation "OTOSMOSAN", indicated in the treatment and control of chronic suppurative ears. Our Representatives will be happy to explain, in detail, the workings of these medications.
Also to distribute our latest series of three (3) Anatomico-Pathologic Charts of the Ear, in color, suitable for framing.

Duke Laboratories, Inc. **Booth No. 63**
Stamford, Connecticut

At Booth 63, Duke Laboratories, Inc., will have on display Elastoplast and Mediplast, surgical bandages and dressings, also Aquaphor, the better base for ointments, Nivea Creme, Nivea Skin Oil and Basis Soap —Prescribers' Cosmetics.

Ethicon Suture Laboratories **Booth No. 82**
New Brunswick, New Jersey

Tantalum Surgical Materials: Tantalum sutures with Atraloc needles attached, tantalum plates, foil, wire, hemostasis clips and gauze will be featured. Ethicon consultants will also demonstrate the advantages of new 5-0 and 6-0 Tru-Chromicized sutures.

C. B. Fleet Company, Inc. **Booth No. 43**
Lynchburg, Virginia

Phospho-Soda (Fleet) is a highly concentrated and purified, aqueous solution of sodium phosphates. It is non-toxic, rapid but mild in action without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction, and for its thorough eliminating and cleansing action on the upper and lower gut.

General Electric X-Ray Corporation **Booth No. 54**
Detroit, Michigan

Factual discussions with members of our Michigan sales and service organization during the state meeting will aid you in your future apparatus planning. If you are thinking about new and improved x-ray or electro-medical apparatus, our Layout Engineers can help you with detailed plans and specifications. Possibly an improvement in radiographic end results is indicated. Or you may wish to know how G.E.'s Periodic Inspection and Adjustment Service can help keep your equipment at its maximum operating efficiency. Why not drop in and avail yourself of our wide experience and know-how?

Gerber Products Company **Booth No. 21**
Fremont, Michigan

You are invited to visit Gerber's Baby Foods booth. A qualified infant nutritionist will be in attendance and will be glad to answer questions on Gerber's Baby Cereals, Gerber's Strained Foods and Gerber's Chopped Foods. Samples of Barley Cereal, Cereal Food and Strained Oatmeal will be available.

Hanovia Chemical and Manufacturing Co. **Booth No. 25**
Newark, New Jersey

A complete line of self-lighting ultraviolet quartz lamps will be on display for orificial and general body irradiation. Don't fail to inquire about our germicidal lamps for the destruction of air-borne bacteria. Popular models will be displayed. Courteous and competent representatives will be on hand to greet you.

J. F. Hartz Company **Booth No. 60**
Detroit, Michigan

The J. F. Hartz Company looks forward with great pleasure to the 81st Annual Convention of the MSMS.
It will be our privilege to exhibit there our pharmaceutical products as well as a full line of surgical instruments and equipment.

H. J. Heinz Company **Booth No. 59**
Pittsburgh, Pennsylvania

57

H. J. Heinz Company is displaying and sampling their tin containers of Strained Foods for infants and Junior Foods especially designed for intermediate feeding. Their representatives would appreciate your recommendations regarding these foods.
Register for: *The Nutritive Value of Vegetables,* 12th edition *Nutritional Charts, Nutritional Observatory, Special Dietary Foods Book* and *Your Baby's Diary and Calendar.*

Hoffmann-La Roche, Inc. **Booth No. 17**
Nutley, New Jersey

Pharmaceutical prescription specialties of rare quality produced at Roche Park, where vitamins are made by the ton, will be exhibited. The medical profescion's interest in PER-OS-CILLIN, the new stable oral Penicillin; the versatile parasympathetic stimulant Prostigmin; and other scientific accomplishment will be satisfied by Hoffman-La Roche representatives who will be in attendance to discuss clinical problems.

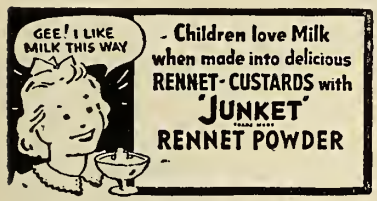
Holland-Rantos Company, Inc. **Booth No. 51**
New York, New York

You are cordially invited to visit the Holland-Rantos booth where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharge of non-specific origin. Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the Dickinson-Freret Chart.

G. A. Ingram Company **Booth Nos. 64, 65**
Detroit, Michigan

STILLE INSTRUMENTS will be displayed at the exhibit of the G. A. INGRAM COMPANY, as well as other new and approved items.

"The 'Junket' Folks" **Booth No. 46**
Little Falls, New York



In space No. 46, "The 'Junket' Folks," Chr. Hansen's Laboratory, Inc. Enlarged photos illustrate the action of the rennet enzyme in forming softer finer milk curds. Free literature describes dietary uses of rennet-custards in infant, child, convalescent, or postoperative feeding. Attendants on duty. Complimentary package of "Junket" Rennet Powder and "Junket" Rennet Tablets presented to physicians who register.

Kellogg Company **Booth No. 48**
Battle Creek, Michigan



Kellogg's famous ready-to-eat cereals, important foods in normal and restricted diets, will be displayed. All of these cereals contain valuable whole grain nutrients, either natural or restored. Pep is fortified with extra thiamine (B_1) and with vitamin D. All-Bran is one of the best sources of niacin and iron. A new Diet Manual and Nutritive Value Charts are available at the Kellogg booth. Mrs. Winefred Loggans of the Home Economics Department is in charge of the exhibit.

H. W. Kinney & Sons **Booth No. 30**
Columbus, Indiana

A. Kuhlmann & Company **Booth No. 13**
Detroit, Michigan

Lea & Febiger **Booth No. 29**
Philadelphia, Pennsylvania

Lea and Febiger will exhibit among their new works Soffer's "Diseases of the Adrenals," Quiring's "The Extremities," Olkon's "Essentials of Neuro-Psychiatry," Burch and Winsor's "Primer of Electrocardiography," and Bell on "Renal Diseases." New editions will be shown of Katz's "Electrocardiography," Levinson and MacFate's "Clinical Laboratory Diagnosis," Kovacs' "Electrotherapy and Light Therapy," Kuntz's "Autonomic Nervous System," Kuntz's "Text-book of Neuro-anatomy," Craig and Faust's "Clinical Parasitology," Clement's "Nitrous Oxide-oxygen Anesthesia," Ivy and Curtis on "Fractures of the Jaws," Stone on the "Newborn Infant" and other standard works.

Lederle Laboratories, Inc. **Booth No. 38**
New York, New York

A display of the latest product in the biological and pharmaceutical fields, featuring Folvite, Lederle's brand of Folic Acid."

Libby, McNeill & Libby **Booth No. 74**
Chicago, Illinois



Libby's strained and homogenized baby foods are featured at the Libby booth. Physicians are invited to stop and discuss new findings on the greater availability of iron and ease of digestion of Libby's Council accepted foods for babies.

Eli Lilly and Company **Booth No. 23**
Indianapolis, Indiana

The Lilly exhibit will feature an interesting demonstration in miniature on penicillin culture. Many Lilly products will be on display, and attending Lilly medical service representatives will be present to assist visiting physicians in every possible way.

J. B. Lippincott Company **Booth No. 1**
Philadelphia, Pennsylvania

You are cordially invited to visit the exhibit of LIPPINCOTT SELECTED PROFESSIONAL BOOKS, where many interesting new books and new editions will be available for your inspection. Books of particular interest include: Bancroft-Murray's new two-volume work on SURGICAL TREATMENT OF THE MOTOR SKELETAL SYSTEM; Bancroft-Pilcher's SURGICAL TREATMENT OF THE NERVOUS SYSTEM; Berens and Zuckerman, DIAGNOSTIC EXAMINATION OF THE EYE; Pitkin's CONDUCTION ANESTHESIA; Foot's PATHOLOGY IN SURGERY; Groff and Houtz, DIAGNOSIS AND TREATMENT OF PERIPHERAL NERVES; Stern and Rosenthal, DIABETIC CARE IN PICTURES; and Burket's ORAL MEDICINE.

The Liquid Carbonic Corporation **Booth No. 66**
(Wall Chemicals Division)
Chicago, Illinois

The Medical Gas Division of the Liquid Carbonic Corporation will exhibit their complete line of anesthesia, therapeutic, resuscitating gases, as well as Oxygen Therapy equipment at the 1946 Detroit session of the Michigan State Medical Society.

M & R Dietetic Laboratories, Inc. **Booth No. 44**
Columbus, Ohio

M. & R. Dietetic Laboratories, booth number 44, wlll display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. F. H.

Behncke and L. A. MacDonald will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

McKesson Appliance Company **Booth No. 37**
Toledo, Ohio

McNeil Laboratories, Inc. **Booth No. 12**
Philadelphia, Pennsylvania

McNeil Laboratories looks forward with a great deal of pleasure to the resumption of personal contacts with its friends attending the Annual Session of the Michigan State Medical Society. Our representatives will be there not only to welcome you, but to tell you of some of the interesting news about such specialties as Hepatinic—the hemopoietic tonic containing crude (unfractionated) liver concentrate subjected to "enzymatic digestion," Butisol Sodium—the "*Intermediate* Sedative-Hypnotic," Sorparin—the new botanical drug product for hepatobiliary dysfunctions, and other interesting products of research developed during recent years.

Mead Johnson & Company **Booth No. 42**
Evansville, Indiana

Servamus Fidem means We are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum and other infant diet materials —including the new pre-cooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to Booth No. 42 will be time well spent.

Medical Arts Surgical Supply Co. **Booth No. 71**
Grand Rapids, Michigan

You are cordially invited to visit the Medical Arts Surgical Supply Company's display of physicians' equipment, including

Hamilton Furniture
Profex X-ray
Surgical Instruments
Pharmaceuticals

Medical Case History Bureau **Booth No. 52**
New York, New York

Simplifying the Doctor's History Record and Bookkeeping System with the INFO-DEX RECORD CONTROL SYSTEM.
Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The INFO-DEX Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive.
THE MEDICAL CASE HISTORY BUREAU Of New York City has specialized for many years in record forms for the doctor's office. Their well-informed representatives will gladly demonstrate the Info-Dex System and discuss your office problems.

Medical Film Guild **Booth Nos. 7, 8**
New York, New York

Medical Film Guild through their "MEDICAL FILMS THAT TEACH" presents a refresher course in fundamental medical problems. These films, representing several years of research, are condensed into half hour productions, each acting as a visual text book. They review such subjects as Parkinson's Disease, the major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism and industrial medicine. They are available to medical societies, medical schools and hospitals and include projection service at no charge, through grants for postgraduate instruction.

Medical Protective Company **Booth No. 3**
Fort Wayne, Indiana

The Medical Protective Company is represented at booth No. 3 where you are invited to call. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for forty-seven years. Bring your professional liability questions and problems to booth No. 3.

Merck & Company, Inc. **Booth No. 76**
Rahway, New Jersey

The Merck exhibit is devoted to the important subject of antibiotic agents, with emphasis on Streptomycin. Antibacterial activity, potential clinical applications, and pharmacological data are presented. Literature on Streptomycin and Penicillin is available, as is also literature on other important chemotherapeutic and nutritional agents, including the Vitamins, the Sulfonamides, the anesthetic agent, Vinethene, and Pyridium, for prompt symptomatic relief in genito-urinary infections.
Mr. S. A. Gaffney will be present to greet his old friends and acquaintances.

The Wm. S. Merrell Company **Booth No. 70**
Cincinnati, Ohio

The Merrell exhibit, under the direction of Messrs. Ferd Heckle and Henry Haas, will feature several new therapeutic agents of wide usefulness in clinical practice. Members and guests of the Society are invited to visit the Merrell booth.

Michigan Medical Service **Booth No. 10**
Detroit, Michigan

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and past six years of operation: (a) Paid to Doctors for Services Rendered; (b) Number of Services Rendered; (c) Growth in Subscribers and Services Rendered (d) Percentage of Income Paid for Administrative Costs; and (e) Assets and Liabilities.

C. V. Mosby Company **Booth No. 50**
St. Louis, Missouri

A cordial invitation is extended to visit the C. V. Mosby Company, booth, where a representative line of publications of timely interest will be displayed. New books and new editions to be shown will include Clendening-Hashinger "Methods of Diagnosis," Key-Conwell "Fractures, Dislocations and Sprains," Tassman "Eye Manifestations of Internal Diseases," Polyak "The Human Ear in Anatomical Transparencies," Rubin "Uterotubal Insufflation," Banyai "Pneumoperitoneum Treatment," John "Diabetes," Main 'Synopsis of Physiology," and Anderson "Synopsis of Pathology." Mr. Arthur Grabruck will be in attendance and glad to discuss your book requirements with you.

National Live Stock and Meat Board **Booth No. 57**
Chicago, Illinois

You are cordially invited to visit the National Live Stock & Meat Board booth and see the completely revised Food Value Charts in their colorful new dress. The second edition of the Nutrition Yardstick featuring plastic slides and other informative material on nutrition will also be on display.

Wm. R. Niedelson **Booth No. 79**
Detroit, Michigan

The first showing of the newest cardiographic improvement in years, the CARDIOTRON, a direct-writing type, will be made at our exhibit. This instrument will eliminate photographic processess, batteries, and give permanent records.
Also on view will be the latest model Jones "MOTOR-BASAL," the original waterless BMR unit.

Ortho Pharmaceutical Corporation **Booth No. 56**
Linden, New Jersey

Ortho Pharmaceutical Corporation will feature their new Triple Sulfa Vaginal Cream, specifically designed for the treatment of bacterial vaginitis. Literature and samples will be available.
In addition, Ortho's complete line of Genetic Pharmaceuticals will be displayed.

Parke, Davis & Company **Booth No. 16**
Detroit, Michigan

Representatives of PARKE, DAVIS & CO., well informed concerning progress in Pharmaceutical Research, and desirous of presenting new advancements to you, will be in attendance at our Technical Exhibit to discuss the nature and employment of new and present products. Displayed will be such outstanding products as THEELIN, MAPHARSEN, and ADRENALIN PREPARATIONS. The latest type of BIOLOGICALS will be on display. Likewise, PENICILLIN and other therapeutic agents of antibiotic, biological, and chemotherapeutic interest will be shown. We sincerely invite your visit to this Exhibit.

Pet Milk Company **Booth No. 19**
St. Louis, Missouri

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding.Miniature cans will be given to physicians visiting the exhibit.

Philip Morris & Co. Ltd., Inc. **Booth No. 69**
New York, New York

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

Picker X-Ray Corporation **Booth Nos. 27, 28**
New York, New York

Picker will exhibit the new Minograph miniature film chest unit which is used for mass survey work; and also for installation in hospitals for screening purposes. A small unit suitable for office practice will also be shown as well as a complete line of radiographic accessories.

Pitman-Moore Company **Booth Nos. 40, 41**
Indianapolis, Indiana

Hospitality will be the watch word at the Pitman-Moore exhibit, booths 40 and 41, with more emphasis on good-fellowship than the products displayed. In attendance to greet their friends in the profession and to discuss recent medical advances will be Messrs. Stuart Ruch, B. J. O'Connell, Jay Ruby and R. G. Mills.

Procter & Gamble Company **Booth No. 36**
Cincinnati, Ohio

Instructions for Bathing of Patient in Bed, the second of Procter & Gamble's time-saving series of handy leaflet pads, is now available. Doctors may also reorder "Instructions for Home Treatment of Acne." Additional leaflets on similar questions of routine home care are being prepared for future distribution.

Professional Management **Booth No. 81**
Battle Creek, Michigan



PROFESSIONAL MANAGEMENT —Records "tailor-made" for the medical profession. If YOUR office does not seem to "click," learn how PM helps hundreds to iron out their problems.

Radium Emanation Corporation **Booth No. 18**
New York, New York

In Booth No. 18, THE RADIUM EMANATION CORPORATION will exhibit a wide variety of instruments and applicators used in modern radium therapy, including permanent and removable composite, leakproof Radon Seeds. The advantages of these seeds will be demonstrated by magnified sections showing their construction in detail.

Randolph Surgical Supply Company **Booth No. 72**
Detroit, Michigan

Randolph Surgical Supply Company will display the latest developments of leading Manufacturers. ART RANKIN and CLIFFORD RANDOLPH will be on hand to welcome the Doctors.

W. B. Saunders Company **Booth No. 4**
Philadelphia, Pennsylvania

Mr. Frank Patterson will represent this publishing house and will exhibit its complete line of books, including Bockus' 3-volume work on "Gastro-enterology," new (5th) edition of Beckman's "Treatment," Allen, Barker & Hines' "Peripheral Vascular Diseases," new (2) edition of Mason's "Preoperative and Postoperative Care," new (2nd) edition of Graybiel & White's "Electrocardiography," new (3rd) edition of Andrew's "Diseases of the Skin," Cooke's "Allergy," new (5th) edition of Curtis' "Gynecology," Jackson & Jackson's "Diseases of the Nose, Throat and Ear," new (4th) edition of Mitchell & Nelson's "Pediatrics," and many others.

Schenley Laboratories, Inc. **Booth No. 68**
New York, New York

The Schenley Laboratories' exhibit is devoted entirely to penicillin and penicillin products, and features clinical illustrations of treated patients. The complete apparatus for penicillin aerosol treatment of respiratory infections by inhalation is demonstrated to interested physicians by well-informed attendants at the booth. Descriptive literature concerning this treatment method and various Schenley Laboratories' products is supplied on request.

Schering Corporation **Booth No. 5**
Bloomfield, New Jersey

The Schering exhibit will feature the latest developments in endocrine therapy, radiographic aids and other pharmaceutical advances.
Of particular interest is the presentation of Combisul-TD. Combisul-TD is a sulfonamide combination based upon the now proved therapy which offers the therapeutic benefits of sulfathiazole and sulfadiazine with a material decrease in the danger of renal toxicity and crystalluria.
Schering professional service representatives will be present to answer inquiries and to provide valuable informative literature.

G. D. Searle & Company **Booth No. 11**
Chicago, Illinois

You are cordially invited to visit the Searle Booth where representatives will be happy to answer questions pertaining to Searle Products of Research. Featured will be Searle Aminophyllin, Metamucil, Ketochol, Floraquin, Diodoquin, Pavatrine, Tetrathione, and Gonadophysin.

Sharp & Dohme, Inc. **Booth No. 24**
Philadelphia, Pennsylvania

Sharp & Dohme will have their display at booth No. 24 featuring Tyrothricin Concentrate for Human Use, "Lyovac," Normal Human Plasma, "Sulfathalidine," "Sulfasuxidine," and "Caligesic" Ointment, a greaseless anesthetic and analgesic ointment which possesses definite antipruritic action. A cordial welcome awaits all visitors.

Smith, Kline & French Laboratories **Booth No. 73**
Philadelphia, Pennsylvania

Benzedrine Sulfate Tablets, N.N.R. and Dexedrine Sulfate Tablets are featured at this exhibit.

Since its introduction some ten years ago, Benzedrine Sulfate, N.N.R. (racemic amphetamine sulfate) has grown steadily in clinical usefulness and today occupies a unique place in routine medical practice.

For certain selected cases, however, it is often desirable to employ a drug combining an even more preponderant central nervous stimulation with a relatively weaker peripheral effect. A closely related compound—Dexedrine Sulfate (dextro-amphetamine sulfate)—precisely fulfills these requirements.

Our specially trained professional representatives will be glad to answer questions concerning the possible uses of our products in your practice.

Spencer Incorporated **Booth No. 47**
New Haven, Connecticut

You will be interested in Spencer Individually Designed Supports for abdomen, back and breasts. On display are supports for patients who have undergone mastectomy. Also displayed are supports for hernia, visceroptosis, nephroptosis with symptoms, obesity, back conditions and back derangements, antepartum and postpartum wear, and breast conditions.

E. R. Squibb & Sons **Booth No. 58**
New York, New York

An exhibit showing the blood levels produced by penicillin when administered in either Oil and Wax or in aqueous solution. Dosages for a variety of diseases are also shown.

Frederick Stearns & Company **Booth No. 75**
Detroit, Michigan

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division.

Neo-Synephrine Hydrochloride products for intranasal, parenteral and ophthalmic use will be featured.

Appella Apple Powder, remarkably efficient therapy for diarrhea;

Gastric Mucin. "nature's antacid;" and various vitamin products will also be shown.

James Vernor Company **Booth No. 80**
Detroit, Michigan

The James Vernor Company invites everyone attending the Annual Session to visit booth Number 80 and have the Vernor Gnome serve you a free bottle of Vernor's Ginger Ale. Personnel from the James Vernor Company will be on hand to answer any questions regarding Vernor's Ginger Ale, and make arrangements for you to inspect the Vernor plant at 239 Woodward Avenue, Detroit.

Westinghouse Electric Corporation **Booth No. 62**
Pittsburgh, Pennsylvania

Westinghouse Electric will feature the Monoflex, its new deluxe single tube diagnostic x-ray table. See this new unit with:

. . . Motor driven tilting table.
. . . Automatic horizontal leveling stop.
. . . 14″ Tubearm movement—from 30″ to 40″.
. . . Fluoroscopic screen movement 3-3/16″ to 17-3/16″.
. . . New fluoroscopic screen "parking."

White Laboratories, Inc. **Booth No. 49**
Newark, New Jersey

White Laboratories, Inc., at Booth No. 49 present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections—and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias.

White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

Winthrop Chemical Company, Inc. **Booth No. 45**
New York, New York

Winthrop Chemical Company, Inc., New York (Booth 45), has available a number of interesting and highly informative booklets. Ask particularly for your copy of Demerol, new analgesic, spasmolytic and sedative, and Creamalin, non-alkaline antacid.

Zimmer Manufacturing Company **Booth No. 2**
Warsaw, Indiana

A full line of Fracture Equipment will be on display. The representative in charge of the booth is well versed in the treatment of fractures, and will gladly demonstrate the use of any items in which the doctors are interested. Among the new items on display, which will interest the surgeons will be the Two Speed Hand Drill, Bone Clamp Set, Electric Cast Cutter, Bush Walking Heel, Webb Bolt Fixation Set, Moore-Blount Blade Plates and Instruments for Hip Surgery, Eggers Bone Plates, McBride Tripod Pin Traction Apparatus, Waugh Clamps, Crego-McCarroll Traction Bow, Blount Knee Retractor, Curry Hip Nail Reamer, Lewin Walking Heel and the Hopkins Hip Nail Extension.

Bond Redemption: "Surveys in the Detroit and Pittsburgh areas show that, during the General Motors and steel strikes, redemption of war and savings bonds did *not* rise above the national average. Recently there has been a definite leveling off of redemption . . . today, some 85,000,000 Americans hold 48.8 billion dollars in bonds designed for individual purchase. All in all, individuals today hold one quarter of the national debt."

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"Michigan Leads With Medical Plan For Vets" and "26 States Copy Michigan's Vet Medical Aid Plan" are typical of the headlines of the many news stories relative to the V. A. program of home-town medical care developed by Michigan doctors of medicine and now being successfully carried on through their co-operation.

The V. A. program, handled through Michigan Medical Service, has been a source of splendid public relations for the medical profession of Michigan.

Michigan State Medical Society
Roster 1946

[An "M" following a name indicates active military service; "E" indicates Emeritus Members; "L" indicates Life Members; "R" indicates Retired Members; all others are Active Members]

Allegan County

Beckett, M. B.....(M) Allegan
Brown, Lewis F.....(M) Otsego
Brunson, Eugene T.....Ganges
Burdick, J. G.....Fennville
Corkill, C. C.....Douglas
Dickinson, C. A.....Wayland
Dolfin, W. E.....(M) Wayland
Flinn, C. C.....Allegan
Hudnutt, Orrin D.....Plainwell
Johnson, E. B.....Allegan
Johnson, H. H.....Martin
Mahan, James E.....Allegan
Medill, W. C.....Plainwell
Ramseyer, Gladwin E.....Plainwell
Stuch, Howard T.....Allegan
Stuck, Olin H.....Otsego
Ten Pas, Henry W.....Hamilton
Van Ness, J. Howard.....Allegan
Vaughan, W. R.....Plainwell
Van Der Kolk, Bert.....Hopkins

Alpena-Alcona-Presque Isle Counties

Bunting, John W.....Alpena
Burkholder, H. J.....Alpena
Carpenter, Clarence A.....Onaway
Constantine, Aeneas.....Harrisville
Hier, Edward A.....Alpena
Kessler, Harold.....(M) Alpena
Lister, George F.....Hillman
Nesbitt, Wm. E.....(M) Alpena
Newton, Wm. B.....Alpena
Ramsey, J. A.....(M) Alpena
O'Donnell, F. J.....Alpena
Parmenter, E. S.....Alpena
Purdy, John W.....Alpena
Rutledge, S. H.....(M) Rogers City
Slade, H. G.....Ionia
Trudeau, J. M.....(M) Cheboygan
Wienczewski, Theophile.....(M) Alpena

Barry County

Altland, J. K.....Hastings
Bernard, Prosper G.....(M) Delton
Clarke, Daniel M.....Hastings
Finnie, R. G.....(M) Hastings
Fisher, Gordon F.....(M) Corpus Christi, Texas
Gwinn, A. B.....Hastings
Harkness, Robert B.....Hastings
Keller, Guy C.....Hastings
Lathrop, Clarence P.....(E) Hastings
Lofdahl, Stewart.....Nashville
Lund, Chester A. E.....Middleville
McIntyre, K. S.....(M) Hastings
Morris, Edgar T.....(L) Nashville
Wedel, Herbert S.....Hastings

Bay-Arenac-Iosco Counties

Alcorn, Kent.....Bay City
Allen, A. D.....Bay City
Andrews, F. T.....Bay City
Asline, J. N.....(M) Essexville
Austin, Justis.....Tawas City
Ballard, W. R.....(E) Bay City
Boulton, A. O.....(E) Gladwin
Brown, G. M.....Bay City
Chapin, Frederick J.....Bay City
Connelly, C. J.....(M) Bay City
Cooper, Harry R.....Oscoda
Criswell, R. H.....Bay City
Dardas, M. J.....(M) Bay City
DeWaele, Paul L.....(M) Bay City
Drummond, Fred.....Kawkawlin
Dumond, V. H.....Bay City
Fisher, Robert E.....(M) Bay City
Foster, L. Fernald.....Bay City
Freel, John A.....Bay City
Gamble, W. G., Jr.....Bay City
Groomes, Charles.....Bay City
Grosjean, J. C.....Bay City
Gunn, Robert.....Bay City
Hagelshaw, G. L.....(M) Bay City
Hasty, Earl.....Whittemore
Hess, C. L.....Bay City
Heuser, Harold H.....Bay City
Horowitz, S. Franklin.....(M) Bay City
Huckins, E. S.....Bay City
Hughes, E. C.....Bay City
Husted, F. Pitkin.....(M) Bay City
Jacoby, A. H.....(M) Bay City
Jens, Otto.....Essexville
Johnson, Orlen J.....Bay City
Jones, Clement R.....Bay City
Jones, Jerry M.....Bay City
Keho, John.....Bay City
Kerr, William.....(E) Bay City
Kessler, Mana.....Bay City
Kessler, S.....Bay City
Knobloch, Howard.....(M) Bay City
Lane, Milton.....Los Angeles, California
Lerner, David.....(M) Au Gres
Loftin, Robert.....Bay City
MacRae, L. D.....Bay City
McDonnell, Walter R.....(M) Pinconning
McEwan, J. H.....Bay City
MacPhail, Joseph.....(M) Bay City
Medvesky, M. J.....(M) Bay City
Miller, Edwin C.....(M) Bay City
Miller, Maurice C.....(M) Sanford
Mitton, Orland W.....East Tawas
Moore, George W.....Bay City
Moore, Neal R.....(M) Bay City
Mosier, D. J.....(M) Bay City
Pearson, Stanley M.....(M) Bay City
Perkins, Roy C.....Bay City
Reutter, C. W.....(M) Bay City
Scrafford, Royston E.....Bay City
Shafer, Harold C.....(M) Bay City
Sherman, R. N.....Bay City
Siler, Delbert E.....Augusta, Ga.
Staley, Hugh.....Omer
Stewart, G. C.....Bay City
Stinson, W. S.....Bay City
Stuart, Alexander A.....Bay City
Stuart Kenneth.....(Associate) Bay City
Tarter, Clyde S.....(M) Bay City
Timreck, Harold A.....(M) Beaverton
Tupper, Virgil.....(R) Bay City
Urmston, Paul R.....Bay City
Vail, Harry F.....(M) Bay City
Warren, E. C.....(E) Bay City
Wilcox, J. W.....Bay City
Wilson, Thomas G.....Bay City
Wittwer, E. A.....Bay City
Zaremba, Aloysius J.....Bay City
Ziliak, A. L.....Bay City

Berrien County

Anderson, H. B.....Watervliet
Allen, Robert C.....St. Joseph
Anderson, Bertha.....St. Joseph
Bartlett, W. M.....(M) Benton Harbor
Belsley, Frank K.....Benton Harbor
Bliesmer, A. F.....St. Joseph
Brown, F. W.....Watervliet
Brown, Rolland J.....(M) Benton Harbor
Burrell, H. J.....Benton Harbor
Cawthorne, H. J.....Benton Harbor
Conybeare, R. C.....Benton Harbor
Crowell, Richard.....(M) St. Joseph
Dunnington, R. N.....Benton Harbor
Eidson, Hazel.....Berrien Springs
Ellet, W. C.....(M) Benton Harbor
Emery Clayton.....St. Joseph
Faber, Michael.....Benton Harbor
Friedman, Morris.....New Buffalo
Garrett, Evan L.....(M) Niles
Gillette, Clarence H.....Niles
Green, Robert.....Eau Claire
Gregory, James.....Berrien Center
Hanna, P. G.....St. Joseph
Harper, Ina.....Benton Harbor
Harrison, L. L.....Niles
Hart, Russell T.....(M) Niles
Helkie, Wm. L.....Three Oaks
Henderson, Fred.....Niles
Henderson, Robert.....Niles
Herring, Nathaniel A.....Niles
Hershey, Noel J.....(M) Niles
Howard, R. B.....Benton Harbor
Huff, H. D.....Niles
King, Frank Jr.....(M) Benton Harbor
Kling, H. C.....Niles
Kok, Harry.....Benton Harbor
Leva, John B.....(M) Benton Harbor
McDermott, J. J.....St. Joseph
Miller, E. A.....Berrien Springs
Mitchell, Carl A.....Benton Harbor
Moore, T. Scott.....Niles
Neville, J. Wm.....Benton Harbor
Ozeran, Chas J.....Benton Harbor
Pritchard, H. M.....Niles
Reagan, Robert E.....(M) Benton Harbor
Rein, Gerald.....Benton Harbor
Richmond, D. M.....St. Joseph
Rosenberry, A. A.....Benton Harbor
Ruth, J. Griswold.....(M) Benton Harbor
Schairer, Wm. W.....Coloma
Smith, W. A.....Berrien Springs
Sowers, Bouton.....(M) Benton Harbor
Strayer, J. C.....Buchanan
Thorup, Don W.....Benton Harbor
Tompkins, C. E.....Benton Harbor
Waterson, Roy S.....Niles
Westervelt, H. O.....Benton Harbor
Winter, Joseph A.....St. Joseph
Woodford, H. E.....Benton Harbor
Yeomans, T. G.....St. Joseph

Branch County

Andrews, Frank A. ..... Coldwater
Bailey, J. E. ..... Coldwater
Beck, Perry C. ..... Bronson
Bien, W. J. ..... Coldwater
Culver, Bert W. ..... Coldwater
Culver, Dean ..... (M) Bronson
Eberhart, L. L. ..... Angola, Ind.
Far, S. E. ..... Quincy
Fraser, R. J. ..... (M) Coldwater
Heustis, Albert E. ..... Coldwater
Joerin, William ..... (M) Coldwater
McLain, R. W. ..... Jackson
Meier, H. J. ..... (M) Coldwater
Mooi, H. R. ..... Coldwater
Olmstead, Kenneth L. ..... (M) Coldwater
Phillips, F. L. ..... Bronson
Rees, Kendall B. ..... Coldwater
Rennell, E. J. ..... Coldwater
Schultz, Samuel ..... Coldwater
Scovill, H. A. ..... (M) Ypsilanti
Smith, L. Lloyd ..... (M) Oregon City, Ore.
Thomas, J. A. ..... Coldwater
Wade, R. L. ..... Coldwater
Walton, N. J. ..... Quincy
Weidner, H. R. ..... (M) Coldwater
Woods, R. H. ..... La Salle, Ill.

Calhoun County

Amos, Norman H. ..... (M) Battle Creek
Baribeau, R. H. ..... Battle Creek
Becker, H. F. ..... (M) Battle Creek
Beuker, Herman ..... Marsball
Bodine, Harold ..... (M) Battle Creek
Bonifer, Philip P. ..... (M) Battle Creek
Brainard, C. W. ..... (M) Battle Creek
Campbell, Alice ..... Albion
Campbell, R. J. ..... (M) Battle Creek
Capron, Manley J. ..... (M) Battle Creek
Church, Starr K. ..... (E) Marshall
Chynoweth, W. R. ..... (M) Battle Creek
Cooper, J. E. ..... Battle Creek
Curless, Grant R. ..... (M) Unknown
Curry, Robert K. ..... (M) Homer
Dickson, A. R. ..... Battle Creek
Dodge, Warren M. Jr. ..... Battle Creek
Fairbanks, Stephen ..... Albion
Finch, D. L. ..... Battle Creek
Forsyth, J. F. ..... (M) Albion
Frank, David L. ..... (M) Unknown
Fraser, R. H. ..... Battle Creek
Funk, L. D. ..... Athens
Gething, Joseph W. ..... Battle Creek
Giddings, A. M. ..... Battle Creek
Gilfillan, Margery J. ..... Battle Creek
Gorsline, Clarence S. ..... Battle Creek
Graubner, F. L. ..... (M) Marshall
Hafford, A. T. ..... Albion
Hansen, E. L. ..... Battle Creek
Hansen, Harvey C. ..... M) Battle Creek
Harris, Rowland H. ..... Battle Creek
Haughey, Wilfrid ..... Battle Creek
Heald, C. W. ..... Battle Creek
Henderson, Louis M. ..... Albion
Henderson, Philip ..... Albion
Herzer, Henry A. ..... Albion
Hibbs, Donald K. ..... (M) Battle Creek
Hills, C. R. ..... Battle Creek
Holtom, B. G. ..... Battle Creek
Howard, W. L. ..... Battle Creek
Hoyt, Aura A. ..... Battle Creek
Hubly, James W. ..... (M) Battle Creek
Humphrey, Archie E. ..... Marshall
Humphrey, Arthur A. ..... (M) Battle Creek
Jeffrey, J. R. ..... Battle Creek
Jesperson, Lydia ..... Battle Creek
Jones, T. K. ..... (M) Marshall
Keagle, Leland R. ..... (M) Battle Creek
Keeler, K. B. ..... Albion
Kingsley, Paul C. ..... (M) Battle Creek
Kinde, M. R. ..... (M) Battle Creek
Knapp, Nettie E. ..... Battle Creek
Kolvoord, Theodore ..... Battle Creek
Lam, Francis ..... (M) Battle Creek
Leitch, Robert ..... (M) Union City
Levy, Joseph ..... (M) Battle Creek
Lewis, W. B. ..... Battle Creek
Lowe, H. M ..... (M) Battle Creek
Lowe, Kennetb M. ..... Battle Creek
Lowe, Stanley T. ..... (M) Battle Creek
MacGregor, Archibald E. ..... Battle Creek
Manni, Lawrence C. ..... Battle Creek
Meister, F. O. ..... (M) Battle Creek
Melges, F. J. ..... Battle Creek
Mercer, C. M. ..... Battle Creek
Morrison, Donald B. ..... (M) Battle Creek
Moshier, Bertba ..... (R) Battle Creek
Mullenmeister, H. F. ..... (M) Battle Creek
Mustard, Russell ..... Battle Creek
Norman, Estelle G. ..... Battle Creek
Norton, Richard C. ..... (M) Battle Creek
Patrick, Gilbert ..... Battle Creek
Patterson, Adonis ..... (M) Battle Creek
Putman, W. N. ..... Battle Creek
Robbert, John ..... Battle Creek
Robins, Hugh ..... Battle Creek
Rorick, Wilma Weeks ..... Battle Creek
Rosenfeld, Joseph E. ..... Battle Creek
Roth, Paul ..... (R) Battle Creek
Royer, C. W. ..... (M) Battle Creek
Scbelm, George W. ..... Battle Creek
Selmon, Bertba L. ..... Battle Creek
Sharp, A. D. ..... Albion
Shipp, Leland P. ..... Battle Creek
Sibilsky, A. Clark ..... Battle Creek
Simpson, Robert S. ..... (M) Battle Creek
Slagle, George W. ..... (M) Battle Creek
Sleight, James D. ..... (M) Battle Creek
Smith, T. C. ..... (M) Toronto, Ont.
Stadle, Wendell H. ..... (M) Battle Creek
Stiefel, Ricbard ..... Battle Creek
Tannenbolz, Harold S. ..... Battle Creek
Taylor, Clifford B. ..... (M) Albion
Toms, Roland E. ..... (M) Lockport, L. I.
Upson, W. O. ..... Battle Creek
Van Camp, Elijab ..... Battle Creek
Verity, Lloyd E. ..... Battle Creek
Walters, F. R. ..... Battle Creek
Watson, Bernard A. ..... (M) Clifton Springs, N. Y.
Wencke. Carl G. ..... Battle Creek
Winslow, Rollin C. ..... Battle Creek
Winslow, Sherwood B. ..... Battle Creek
Zindler, George A. ..... Battle Creek
Zinn, Karl ..... (M) Battle Creek

Cass County

Adams, U. M. ..... Marcellus
Clary, R. I. ..... (M) Dowagiac
Hickman, John ..... Dowagiac
Kelsey, James H. ..... Cassopolis
Loupee, George ..... Dowagiac
Loupee, Sherman L. ..... Dowagiac
Lyman, W. R. ..... Dowagiac
Newsome, Otis ..... Cassopolis
Pierce, Kenneth C. ..... Dowagiac
Rice, Franklin ..... (M) Niles
Zwergel, E. H. ..... Cassopolis

Chippewa-Mackinac Counties

Bandy, Festus C. ..... Sault Ste. Marie
Blair, H. M. ..... (M) Sault Ste. Marie
Carr, E. S. ..... Pickford
Conrad, George A. ..... Sault Ste. Marie
Gilfillan, E. O. ..... (M) Sault Ste. Marie
Hagele, Marie A. ..... Sault Ste. Marie
Harrington, H. M. ..... Sault Ste. Marie
Howe, D. C. ..... Sault Ste. Marie
McBryde, Lyman M. ..... Sault Ste. Marie
McDonald, Allan W. ..... Mackinac Island
Mertaugh, W. F. ..... (M) Sault Ste. Marie
Montgomery, B. T. ..... Sault Ste. Marie
Rhind, E. S. ..... Sault Ste. Marie
Vegors, Stanley H. ..... Sault Ste. Marie
Wallen, Le Roy J. ..... (M) Sault Ste. Marie
Willison, C. ..... Sault Ste. Marie
Yale, I. V. ..... Sault Ste. Marie

Clinton County

Cook, Bruno ..... Westphalia
Elliott, Bruce R. ..... Ovid
Foo, Charles T. ..... St. Johns
Frace, Guy H. ..... St. Johns
Henthorn, A. C. ..... St. Johns
Ho, Thomas Y. ..... St. Johns
Luton, F. E. ..... St. Johns
McWilliams, W. B. ..... Maple Rapids
Russell, Sherwood R. ..... (M) St. Johns
Stoller, Paul R. ..... Fowler
Wahl, George E. ..... (M) St. Johns

Delta-Schoolcraft Counties

Bernier, A. Barrso ..... Nahma
Benson, G. W. ..... Escanaba
Boyce, D. H. ..... Escanaba
Brenner, Ervin J. ..... (M) Manistique
Carlton, A. J. ..... Escanaba
Chenoweth, Nancy R. ..... (E) Escanaba
Clausen, Claire H. ..... (M) Dearborn
Defnet, Harry J. ..... Escanaba
Diamond, J. A. ..... Gladstone
Frenn, N. J. ..... Bark River
Fyvie, James ..... (M) Manistique
Groos, Harold Q. ..... Escanaba
Groos, Louis P. ..... Escanaba
Hult, Otto S. ..... Gladstone
Kitchen, A. S. ..... Escanaba
Lemire, Wm. A. ..... (M) Escanaba
Lindquist, N. L. ..... Manistique
McInerney, Edna C. ..... Escanaba
McInerney, Thomas A. ..... (M) Escanaba
Miller, A. H. ..... Gladstone
Moll, G. W. ..... Escanaba
Pleune, R. E. ..... (M) Escanaba
Sbaw, George A. ..... Manistique
Walch, J. J. ..... Escanaba

Dickinson-Iron Counties

Alexander, W. H. ..... Iron Mountain
Boyce, George H. ..... Iron Mountain
Browning, James L. ..... Iron Mountain
Cooper, C. A. ..... Stambaugb
De Salvo, F. ..... Niagara, Wis.
Fiedling, Wm. ..... Norway
Frederickson, Geron ..... Iron Mountain
Gloss, Kenneth E. ..... (M) Colorado
Haight, Harry H. ..... (M) Crystal Falls
Hayes, R. E. ..... Sagola
Huron, W. H. ..... Iron Mountain
Irvine, L. E. ..... Iron River
Kofmebl, Wm. J. ..... Stambaugh
McEachran, Hugh D. (M) Iron Mountain
Menzies, Clifford ..... Iron Mountain
Retallack, R. C. ..... (M) Iron River
Smith, Donald R. ..... Iron Mountain

Eaton County

Arner, Fred L. ... Bellevue
Brown, B. Philip ... (M) Charlotte
Burdick, Austin F. ... Grand Ledge
Carothers, Daniel J. ... (M) Charlotte
Engle, Paul ... Olivet
Goff, S. B. ... (M) Eaton Rapids
Hannah, H. W. ... Charlotte
Huber, Chas. D. ... Charlotte
Huyck, Stanhope P. ... (M) Sunfield
Imthun, Edgar F. ... (M) Grand Ledge
McLaughlin, C. L. D. ... Vermontville
Myers, Albert W. ... Potterville
Paine, E. Madison, Jr. ... (M) Traverse City
Rummell, Robert J. ... Grand Ledge
Sassaman, F. W. ... Charlotte
Sevener, Lester G. ... Charlotte
Stucky, George ... Charlotte
Van Ark, Bert ... (M) Eaton Rapids
Van Kolken, P. J ... Eaton Rapids
Willits, C. O. ... Charlotte

Genessee County

Adams, Chester ... (M) Grand Blanc
Anderson, Harley H. ... (M) Mt. Morris
Andrews, N. A. C. ... (M) Flushing
Anthony, Geo. E. ... (M) Flint
Backus, Glenn R. ... (M) Flint
Baird, James ... Flint
Baird, William C. ... (M) Flint
Bald, Frederick W. ... (M) Flint
Barbour, Fleming A. ... (M) Flint
Baske, Franklin W. ... Flint
Bateman, L. G. ... (M) Flint
Benson, J. C. ... Flint
Bernstein, Eli N. ... (M) Flint
Biggar, H. R. ... Flint
Bishop, D. L. ... Flint
Blakeley, A. C. ... Flint
Bogart, Leon M. ... Flint
Boles, William P. ... Flint
Bonathan, Alvin T. ... Flint
Bradley, Robert ... (M) Flint
Brain, R. Gordon ... Flint
Branch, Hira E. ... (M) Flint
Brasie, Donald R. ... Flint
Briggs, Guy D. ... Flint
Bruce, Wm. W. ... (M) Swartz Creek
Buchanan, W. Fremont ... (M) Fenton
Burkett, L. V. ... Flint
Burnell, Max ... Flint
Burnside, Howard B. ... (M) Flint
Caster, E. Wilbur ... Huntington Woods
Chambers, Myrton S. ... Flint
Chandler, M. E. ... Flint
Charters, John H. ... Flint
Clark, Clifford P. ... Flint
Colwell, C. W. ... (M) Flint
Connell, J. T. ... Flint
Conover, G. V. ... (M) Flint
Conover, T. S. ... Flint
Cook, Henry ... Flint
Covert, F. L. ... Gaines
Cox, T. J. ... (M) Flint
Credille, B. A. ... Flint
Curry, George ... Flint
Curtin, J. H. ... Flint
David, T. George ... Flint
Del Zingro, N. ... Davison
Denbolm, Nan H. ... Flint
Dickstein, Bernard ... (M) Flint
Dimond, E. G. ... Flint
Dodds, F. E. ... Flint
Drewyer, Glen ... (M) Flint
Edgerton, A. C. ... Clio
Eichhorn, Ernest ... Flint
Eickhorst, Thomas N. ... (M) Flint
Elliott, H. B. ... Flint
Ettinger, Ralph D. ... Fenton
Evers, J. W. ... Flint
Farhat, M. M. ... (M) Flint
Fee, Manson G. ... (M) Flint
Finkelstein, T. ... (M) Flint
Flynn, S. T. ... (M) Flint
Foley, S. I. ... Flint
Fuller, H. T. ... (M) Mt. Morris
Gelenger, Stephen M. ... (M) Flint
Gleason, N. Arthur ... Flint
Goering, George R. ... Flint
Golden, H. Maxwell ... Flint
Goodfellow, B. T. ... Flint
Gorne, S. S. ... (M) Flint
Grover, H. F. ... Flint
Griffin, Ernest P. ... (M) Flint
Guile, Earl ... Flint
Guile, G. S. ... Flint
Gundry, G. L. ... Grand Blanc
Gutow, Isadore ... Flint
Gutow, J. J. ... (M) Flint
Hague, R. F. ... (M) Flint
Hall, R. F. ... (M) Flint
Halligan, Raymond S. ... Flint
Hamady, Ruth ... Flint
Hamilton ,A. J. ... Flint
Harper, A. W. ... Flint
Harper, Homer ... Flint
Harrison, Leo D. ... Flint
Hawkins, James E. ... Flint
Hays, George A. ... (M) Flint
Hilt, Lawrence M. ... (M) Flint
Hiscock, H. H. ... (M) Flint
Houston, James ... Swartz Creek
Hubbard, Wm. B. ... Flint
Hufton, Wilfred L. ... Flint
Jefferson, Harry ... Flint
Jermstad, Robert J. ... Flint
Johnson, Arthur H. ... Flint
Johnson, Frank D. ... (M) Flint
Jones, Lafon ... Flint
Kaleta, Edward ... (M) Flint
Kaufman, Lewis D. ... (M) Flint
Kirk, A. Dale ... Flint
Knapp, M. S. ... (R) Fenton
Kretchmar, A. H. ... Flint
Kurtz, J. J. ... Flint
Lambert, L. A. ... (M) Goodrich
Leach, J. L. ... Flint
Livesay, Jacskon E. ... Flint
Logan, G. W. ... Flushing
Macduff, R. B. ... Flint
MacGregor, D. M. ... Flint
Macksood, Joseph ... Flint
Marsh, H. L. ... Flint
Marshall, William H. ... Flint
McArthur, A. ... Flint
McGarry, R. A. ... Flint
McLeod, K. W. A. ... Flint
Miller, Bryce ... Flushing
Miller, Edwin E. ... Flint
Miller, Loren Eugene ... Flint
Miltich, Anthony J. ... Flint
Moore, John W. ... Flint
Moore, Kenneth B. ... Flint
Morrish, Ray S. ... Flint
Morrissey, V. H. ... Flint
Mosier, Edward C. ... Otisville
Odle, Ira ... Flint
Olson, James A. ... Detroit
O'Neil, C. H. ... (Retired) Deckerville
Orr, J. Walter ... Flint
Phillips, R. L. ... Flint
Pfeifer, A. C. ... Mt. Morris
Pratz, O. C. ... Flint
Preston, Otto ... Flint
Probert, C. C. ... Flint
Randall, H. E. ... Flint
Reeder, Frank E. ... Flint
Reichard, Orill ... Flint
Reid, Wells C. ... Goodrich
Richeson, V. ... Flint
Rieth, George F. ... (M) Flint
Reynolds, A. J. ... Flint
Roberts, Floyd A. ... Flint
Rowell, Wilfred J. ... (M) Flint
Rowley, James A. ... Flint
Rulney, Max ... (M) Flint
Rundles, Walter Z. ... (M) Flint
Rynearson, W. J. ... Fenton
Sandy, K. R. ... (M) Flint
Sauber, Bertrum ... Flint
Scavarda, Charles J. ... (M) Flint
Schiff, B. A. ... (M) Flint
Scott, R. D. ... Flint
Searles, Karl F. ... Flint
Shantz, L. O. ... Flint
Sleeman, Blythe R. ... Linden
Sheeran, Daniel H. ... Flint
Shipman, Charles W. ... Flint
Sirna, Anthony R. ... (M) Flint
Smith, D. C. ... Flint
Smith, E. C. ... Flint
Smith, Maurice J. ... (M) Flint
Sniderman, Benjamin ... Flint
Snyder, Charles E. ... (M) Swartz Creek
Sorkin, Morris L. ... (M) Flint
Sorkin, S. S. ... (M) Flint
Stephenson, Robert A. ... Flint
Steinman, F. H. ... (M) Flint
Stevenson, W. W. ... Flint
Streat, R. W. ... Flint
Stroup, C. K. ... Flint
Sutherland, James K. ... Flint
Sutton, George ... Flint
Sutton, M. R. ... Flint
Thompson, Alvin ... Flint
Tofteland, Elmer H. ... (M) Flint
Treat, D. L. ... Flint
Vander Slice, David ... Flint
Van Gorder, George ... (M) Davison
Vary, Edwin P. ... (M) Flint
Walcott, C. G. ... (M) Fenton
Ward, Nell ... Flint
Ware, Frank A. ... Flint
Wark, D. R. ... Flint
Wentworth, John E. ... Flint
Werness, Inga W. ... Flint
White, Carl H. ... (M) Fenton
White, Herbert ... Flint
Williams, W. S. ... Flint
Willoughby, G. L. ... (M) Flint
Willoughby, L. L. ... Flint
Wills, T. N. ... Flint
Wilson, W. K. ... (M) Flint
Woughter, Harold W. ... (M) Flint
Wright, D. R. ... Flint
Wyman, J. S. ... Flint

Gogebic County

Albert, S. G. ... Ironwood
Anderson, Charles E. ... Bessemer
Eisele, D. C. ... Ironwood
Gertz, M. A. ... Ironwood
Gorrilla, A. C. ... Ironwood
Gullickson, Miles ... (M) Ironwood
Hendrickson, A. O. ... Ironwood
Lieberthal, M. J. ... Ironwood
Lieberthal, Paul ... Ironwood
Lojacono, Salvatore ... Ironwood
Maccani, Wm. L. ... Ironwood
Nezworski, H. T. ... Ironwood
O'Brien, A. J. ... Ironwood
Pierpont, D. C. ... Ironwood
Pinkerton, H. A. ... (M) Ironwood
Stevens, Charles E. ... Ironwood
Tressel, H. A. ... Wakefield
Urquhart, C. C. ... Ironwood
Wacek, W. H. ... Ironwood

Grand-Traverse-Leelanau-Benzie Counties

Atkinson, C. F. ... Traverse City
Baker, Dorothy ... Traverse City
Baumann, Milton C. ... (M) Traverse City
Beall, John G. ... Traverse City
Berghorst, John ... Traverse City
Bolan, Ellis J. ... Suttons Bay
Brownson, Jay J. ... Kingsley
Brownson, Kneale M. ... (M) Traverse City
Bushong, B. B. ... Traverse City
Ellis, Claude I. ... Suttons Bay
Gallagher, W. H. ... Traverse City
Gauntlett, J. W. ... Traverse City
Goodrich, Dwight ... Traverse City
Grawn, F. A. ... Traverse City
Hall, James W. ... (M) Traverse City
Hamilton, Earl E. ... (M) Traverse City
Haynes, H. B. ... Traverse City
Huene, Nevin ... (M) Traverse City
Huston, Russell R. ... Elk Rapids
Hyslop, Wm. T. ... Traverse City
Jerome, Jerome T. ... Traverse City

Kitson, V. H. ..... Elk Rapids
Knapp, Joseph L. ..... (M) Traverse City
Kyselka, H. B. ..... Traverse City
Lemen, Charles E. ..... (M) Traverse City
Lentz, R. J. ..... (M) Traverse City
Lossman, R. T. ..... Traverse City
Mumby, Clinton J. ..... (M) Traverse City
Murphy, Fred E. ..... Traverse City
Nickels, M. M. ..... (M) Traverse City
Osterlin, Mark ..... Traverse City
Power, Frank H. ..... (M) Traverse City
Sheets, R. Philip ..... Traverse City
Sladek, E. F. ..... Traverse City
Stone, Fordyce H. ..... Beulah
Swanton, L. ..... Traverse City
Swartz, F. G. ..... Traverse City
Thacker, Fred R. ..... Frankfort
Thirlby, E. L. ..... Traverse City
Thompson, T. W. ..... Traverse City
Trautman, Frederick B. ..... (M) Frankfort
Way, Lewis R. ..... (M) Traverse City
Weitz, Harry ..... Traverse City
Wilcox, Paul H. ..... Traverse City
Willard, Wm. G. ..... Benzonia
Willoughby, Frances L. (M) Traverse City
Zielke, I. H. ..... (M) Traverse City
Zimmerman, J. G. ..... Traverse City

Gratiot-Isabella-Clare Counties

Aldrich, Alfred L. ..... Ithaca
Barstow, D. K. ..... (M) St. Louis
Barstow, Wm. E. ..... St. Louis
Becker, Myron G. ..... Edmore
Budge, M. J. ..... Ithaca
Burch, L. J. ..... Mt. Pleasant
Burt, C. E. ..... Ithaca
Carney, T. J. ..... Alma
Dale, Edward C. ..... (M) Shepherd
Davis, L. L. ..... (M) Mt. Pleasant
Drake, Wilkie M. ..... Breckenridge
Du Bois, C. F. ..... Alma
Elliott, L. E. ..... Edmore
Graham, B. J. ..... (M) Alma
Hall, B. C. ..... Pompeii
Hammerberg, Kuno ..... (M) Clare
Harrigan, Wm. L. ..... Mt. Pleasant
Hersee, Wm. E. ..... (M) Mt. Pleasant
Hyslop, Leland F. ..... Mt. Pleasant
Johnson, P. R. ..... Mt. Pleasant
McArthur, Stewart C. ..... Clare
Miller, S. W. ..... (M) Alma
Oldham, E. S. ..... (M) Breckenridge
Putzig, Louis M. ..... Blanchard
Rondot, E. F. ..... Lake
Rottschafer, J. L. ..... (M) Alma
Silvert, P. P. ..... Vestaburg
Slattery, F. G. ..... (M) Clare
Strange, Russell H. ..... Mt. Pleasant
Waggoner, R. L. ..... St. Louis
Wilcox, R. A. ..... Alma
Wilson, Earl C. ..... Harrison
Wolfe, Kenneth P. ..... (M) Alma
Wood, Cornelius B. ..... (M) Clare

Hillsdale County

Bates, Morton P. ..... Hillsdale
Davis, L. A. ..... Montgomery
Day, Luther W. ..... Jonesville
Douglas, E. W. ..... Hillsdale
Green, B. F. ..... Hillsdale
Hanke, George R. ..... Ransom
Hodge, C. L. ..... Reading
Johnson, C. E. ..... (M) Hillsdale
Kinzel, R. W. ..... (M) Litchfield
MacNeal, John A. ..... Hillsdale
Mattson, H. F. ..... (M) Hillsdale
Miller, Harry C. ..... Hillsdale
Moench, George F. ..... Hillsdale
Sawyer, Walter W. ..... (M) Hillsdale
Sterling, John S. ..... Jerome
Strom, A. W. ..... (M) Hillsdale

Houghton-Baraga-Keweenaw Counties

Abrams, James C. ..... Calumet
Acocks, J. R. ..... (M) Houghton
Aldrich, A. B. ..... Houghton
Aldrich, Addison D. ..... Houghton
Aldrich, Leonard ..... (M) Hancock
Bourland, Phillip D. ..... Calumet
Brewington, George F. ..... (E) Mohawk
Burke, John ..... Hubbell
Gregg, W. T. S. ..... (E) Calumet
Hilmer, R. E. ..... Beacon Hill
Hosking, Frederick S. ..... (M) Calumet
Janis, A. J. ..... Hancock
Kadin, Maurice ..... (M) Chicago
King, Wm. T. ..... Ahmeek
Kirton, Joseph R. W. ..... Calumet
Kolb, F. E. ..... (M) Calumet
La Bine, Alfred ..... Houghton
Levin, Simon ..... Houghton
Mac Queen, Donald K. ..... (E) Laurium
Manthei, W. A. ..... Lake Linden
Marshall, Frank F. ..... L'Anse
McClure, Robert James ..... Calumet
Murphy, Percy C. ..... Ahmeek
Roberts, Melvin D. ..... (M) Hancock
Roche, A. C. ..... Calumet
Roche, Andrew M. ..... (M) Calumet
Sarvela, H. L. ..... Hancock
Scott, Benton V. D. ..... (M) Hancock
Sloan, P. S. ..... Houghton
Smith, Charles R. ..... Houghton
Stahr, H. S. ..... Los Angeles, Calif.
Stern, Isadore D. ..... Houghton
Stewart, Marshall ..... (M) Unknown
Tinetti, Ernest F. ..... (M) Laurium
Whitmore, R. C. ..... Hancock
Wickliffe, T. P. ..... Calumet
Willson, P. H. ..... Chassell
Winkler, Henry J. ..... L'Anse
Wood, Neal N. ..... Calumet

Huron County

Gettle, Roy R. ..... Kinde
Henderson, J. Bates ..... Sebewaing
Herrington, Charles I. ..... Bad Axe
Herrington, Willet J. ..... Bad Axe
Holdship, Wm. B. ..... Ubly
Monroe, Duncan J. ..... Elkton
Morden, Charles B. ..... Bad Axe
Oakes, C. W. ..... Harbor Beach
Ritsema, John ..... Sebewaing
Scheurer, C. ..... Pigeon
Thumme, Harrison F. ..... Sebewaing

Ingham County

Atkinson, Everett H. ..... East Lansing
Badgley, W. O. ..... Lansing
Barrett, C. D. ..... Mason
Bartholomew, Henry ..... (R) Lansing
Bauer, Theodore I. ..... Lansing
Behen, Wm. C. ..... Lansing
Bellinger, E. C. ..... Lansing
Black, Charles E. ..... Williamston
Black, Gertrude ..... Williamston
Bobczynski, Wilhelmina ..... Lansing
Bradford, C. W. ..... Lansing
Breakey, Robert S. ..... Lansing
Briede, Paul C. ..... Lansing
Brown, F. W. Jr. ..... (M) Lansing
Brubaker, Earl ..... Lansing
Brucker, Karl B. ..... Lansing
Bruegel, Oscar H. ..... East Lansing
Burhans, Robert ..... (M) Lansing
Calomeni, Anthony D. ..... Lansing
Cameron, W. J. ..... Lansing
Carr, E. I. ..... Lansing
Christian, L. G. ..... Lansing
Clark, William E. ..... (M) Mason
Clarke, Emile A. ..... Lansing
Clinton, George R. ..... (M) Mason
Cook, Martin J. ..... (M) Lansing
Cook, R. J. ..... Lansing
Cope, H. E. ..... Lansing
Corneliuson, G. B. ..... Lansing
Corsaut, J. C. ..... Mason
Cross, Frank S. ..... Lansing
Cummings, G. D. ..... Lansing
Darling, L. H. ..... Lansing
Dart, Dorothy ..... Lansing
Dean, Carleton ..... Lansing
De Kleine, Wm. ..... Lansing
De Vries, C. F. ..... Lansing
Dolbee, Malcolm ..... (M) East Lansing
Doyle, Charles R. ..... (M) Lansing
Doyle, C. P. ..... Lansing
Drolett, Donald J. ..... (M) Ann Arbor
Drolett, Fred J. ..... Lansing
Drolett, Lawrence ..... (M) Lansing
Dunn, F. C. ..... Lansing
Dunn, F. M. ..... Lansing
Ellis, Bertha W. ..... Lansing
Ellis, C. W. ..... Lansing
Feeney, Kenneth J. ..... Lansing
Finch, Russell L. ..... Lansing
Fisher, D. W. ..... (M) Lansing
Fosget, Wilbur W. ..... Lansing
Foust, E. H. ..... Lansing
French, Horace L. ..... Lansing
Galbraith, Dugald A. ..... Lansing
Gardner, C. B. ..... Lansing
Gibson, T. E. ..... (M) Lansing
Goldner, R. E. ..... (M) Lansing
Gunderson, G. O. ..... Lansing
Harris, Dean W. ..... Lansing
Harris, Herbert W. ..... (M) Lansing
Harrold, J. F. ..... (M) Lansing
Hart, L. C. ..... Lansing
Heald, Gordon H. ..... (M) Wyandotte
Heckert, Frank B. ..... Lansing
Heckert, J. K. ..... Lansing
Hendren, Owen S. ..... (M) Williamston
Henry, L. L. ..... Lansing
Higgins, E. P. ..... (M) Unknown
Himmelberger, R. J. ..... (M) Lansing
Hodges, Kenneth P. ..... (M) Lansing
Holland, Charles F. ..... East Lansing
Huggett, Clare C. ..... (M) Lansing
Hughes, Howard A. ..... (M) Coeur d'Alene, Idaho
Huntley, Fred M. ..... Lansing
Hurth, M. S. ..... Lansing
Isbister, John L. ..... (M) Lansing
Johnson, Kenneth H. ..... (M) Lansing
Jones, Francis A. ..... Lansing
Jones, Francis, Jr. ..... Lansing
Kahn, David ..... Lansing
Kalmbach, R. E. ..... Lansing
Keim, C. D. ..... Lansing
Kelly, William H. ..... (M) Lansing
Kent, Edith Hall ..... Lansing
Kent, Herbert K. ..... Lansing
Kenyon, Fanny H. ..... Lansing
Kielhorn, W. P. ..... (M) Ft. Smith, Ark.
Klunzinger, Willard R. ..... Lansing
Larrabee, E. E. ..... Williamston
Le Duc, Don M. ..... (M) Lansing
Ley, Wilfred ..... (M) Lansing
Lincoln, John L. ..... (M) Lansing
Loree, Maurice C. ..... Lansing
Lucas, T. H. ..... Lansing
Ludlum, L. C. ..... Lansing
Markuson, Kenneth E. ..... Lansing
Martin, Wayne O. ..... Lansing
McConnell, E. G. ..... (R) Lansing
McCorvie, C. Ray ..... East Lansing
McCoy, Earl M. ..... Grand Ledge
McCrumb, R. R. ..... Lansing
McElmurry, Leland R. ..... Lansing
McElmurry, N. K. ..... Lansing
McGillicuddy, Oliver B. ..... (M) Lansing

McGillicuddy, Robert J.....(M) Lansing
McIntyre, J. E.....Lansing
McNamara, Edward.....(M) Lansing
McNamara, William E.....Lansing
Meade, Wm. H.....(M) Lansing
Mercer, Walter E.....(M) East Lansing
Meyer, Hugh R.....Lansing
Miller, H. A.....Lansing
Mitchell, A. B.....Lansing
Molnar, S. K.....(M) Lansing
Morrison, C. V.....Lansing
Morrow, R. J.....(M) Lansing
Myers, Victor C.....Lansing
Ochsner, P. J.....Lansing
O'Sullivan, Gertrude.....Mason
Pinkham, R. A.....Lansing
Potter, Earl C.....(M) Lansing
Ponton, J.....Mason
Prall, H. J.....Lansing
Randall, O. M.....Lansing
Rector, Frank L.....Lansing
Richards, F. D.....(M) De Witt
Richardson, M. L.....Lansing
Roberts, Russell.....Ocean City, N. J.
Robson, Edmund J.....(M) Lansing
Rozan, J. S.....Lansing
Rozan, M. M.....(M) Lansing
Russell, Claude V.....(R) Northport
Sander, John F.....(M) Lansing
Schoff, Charles.....Williamston
Seger, Fred L.....Lansing
Shaw, Milton.....Lansing
Shepherd, C. S.....Highland Park
Sherman, George A.....Lansing
Sichler, Harper G.....Lansing
Silverman, Irving E.....(M) Lansing
Smith, Anthony V.....Mason
Smith, H. M.....Lansing
Smith, Irma.....East Lansing
Smith, Lillian R.....Lansing
Snell, Dana M.....Lansing
Snyder, Le Moyne.....Lansing
Spaulding, Thomas.....(M) Lansing
Stanka, Andrew G.....Grand Ledge
Spencer, Perry.....(M) Lansing
Stanley, Arthur L.....(M) Lansing
Steiner, A. A.....(M) Lansing
Steiner, S. D.....Lansing
Stiles, Frank.....(M) Lansing
Strauss, P. C.....Lansing
Stringer, C. J.....Lansing
Swartz, Frederick C.....(M) Lansing
Tamblyn, F. W.....(M) Lansing
Thomas, Lucius G.(M) Winchester, Mass.
Toothaker, Kenneth.....(M) Lansing
Town, F. R.....Lansing
Towne, Lawrence C.....Lansing
Trescott, R. F.....(M) Lansing
Trimby, Robert H.....Lansing
Troost, F. L.....Holt
Vander Slice, E. R.....Lansing
Vander Zalm, T. P.....(M) Lansing
Venier, Joseph.....Lansing
Wadley, Ralph.....Lansing
Webb, Roy O.....(M) Okemos
Welch, William H.....Lansing
Wellman, John M.....(M) Lansing
Wetzel, John O.....Lansing
Wilensky, Thomas.....Lansing
Wiley, Harold W.....Lansing
Willson, Howard S.....Lansing
Wilson, Harry A.....Lansing

Ionia-Montcalm Counties

Bird, Wm. L.....Greenville
Botting, A. J.....Portland
Bracey, L. E.....Sheridan
Bunce, E. P.....Trufant
Cook, George H.....Caro
Dunkin, Lloyd S.....(M) Greeenville
Fleming, J. C.....Pewamo
Fox, Harold M.....Portland
Geib, O. P.....Carson City
Hansen, Carl M.....(M) Stanton
Hansen, M. M.....Greenville
Haskell, Robert H.....Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
Johns, Joseph J.....Ionia
Kelsey, L. E.....Lakeview
Kling, V. F.....(M) Michigan City, Ind.
Lilly, Isaac S.....Stanton
Marston, L. L.....(M) Lakeview
McCann, John J.....Ionia
Michmerhuizen, Robert E.....(M) Belding
Murawa, V. J.....Ionia
Norris, Wm. W.....(M) Japan
Peabody, C. H.....Lake Odessa
Pankhurst, C. T.....Ionia
Robertson, P. C.....Ionia
Seidel, Karl E.....(M) Ionia
Slagh, Milton E.(M) Round Lake, Minn.
Socha, Edmund S.....Ionia
Swift, E. R.....Lakeview
VanDuzen, V. L.....Belding
VanLoo, J. A.....(M) Belding
Weaver, Harry B.....Greenville
Whitten, R. R.....Ionia

Jackson County

Ahronheim, J. H.....(M) Jackson
Alter, R. H.....Jackson
Anderson, W. B.....Jackson
Appel, S.....(M) Jackson
Baker, G. M.....Parma
Bartholic, F. W.....(M) Homer
Beckwith, S. A.....Stockbridge
Bullen, G. R.....Jackson
Chabut, H. M.....Jackson
Clarke, C. S.....Jackson
Cochrane, Wayne A.....Jackson
Cooley, Randall M.....Jackson
Corley, C.....Jackson
Corley, Ennis.....Jackson
Cox, Ferdinand.....Jackson
Crowley, Edward D.....(M) Jackson
Culver, Guy D.....Stockbridge
Dailey, Byrne.....(M) Detroit
DeMay, C. E.....Jackson
DeMay, John.....(M) Texas
Dengler, C. R.....Jackson
Durocher, Normand E.....(M) Jackson
Edmonds, J. M.....(M) Tuba City, Ariz.
Enders, W. H.....Jackson
Filip, H. K.....Jackson
Finton, Max.....(M) Ann Arbor
Finton, Robert E.....(M) S. Carolina
Finton, Walter L.....Jackson
Fisher, Joseph V.....(M) Chelsea
Foust, W. L.....Grass Lake
Gibson, F. J.....Jackson
Glover, H. G.....(R) Jackson
Gordon, D. L.....(M) Jackson
Greenbaum, Harry.....(M) Jackson
Growt, Bowers H.....Addison
Habenicht, Hilda.....Jackson
Hackett, T. E.....Jackson
Hanft, Cyril F.....Springport
Hanna, R. J.....(M) Jackson
Hardie, G. C.....Jackson
Harris, Lester J.....Jackson
Hicks, Glenn C.....Jackson
Holst, John B.....(M) Jackson
Holstein, A. P.....(M) Manchester
Huntley, W. B.....Jackson
Hurley, H. L.....Jackson
Keefer, A. H.....Concord
Kudner, Don F.....Jackson
Lake, Edward C.....(M) Detroit
Lake, William H.....Jackson
Landron, Daniel.....(M) Michigan Center
Lathrop, William W.....(E) Jackson
Leahy, E. O.....Jackson
Lenz, C. R.....(M) Jackson
Leonard, Clyde A.....Jackson
Lewis, E. F.....Jackson
Ludwick, J. E.....(M) Jackson
McGarvey, W. E.....Jackson
McLaughlin, M. J.....Jackson
McLauthlin, Herbert B.(M) Denver, Col.
Meade, Robert.....(M) New Orleans, La.
Meads, J. B.....Jackson
Miller, J. L.....(M) Jackson
Miller, Samuel L.....(M) Jackson
Munro, C. D.....Jackson
Munro, James E.....Jackson
Munroe, Nathan.....(M) Jackson
Murphy, B. M.....(M) Jackson
Newton, R. E.....Jackson
Oleksy, S.....(M) Jackson
O'Meara, James J.....Jackson
Otis, Grant L.....(M) Jackson
Payne, Andrew K.....Jackson
Phillips, G.....Jackson
Pier, C. T.....Jackson
Porter, H. W.....Jackson
Pray, Frank F.....Jackson
Pray, G. R.....Jackson
Quirk, Edmund J.....Chelsea
Ransom, F. G.....Jackson
Rice, John W.....(M) Jackson
Riley, Philip A.....Jackson
Roberts, Arthur J.....(E) Jackson
Sargent, Leland E.....(M) Jackson
Sautter, Wm.....(M) Unknown
Schepeler, C. W.....Brooklyn
Schmidt, T. E.....Jackson
Scott, John A.....(M) Jackson
Seybold, Edward G.....(M) Ann Arbor
Shaeffer, A. M.....Jackson
Sill, Henry W.....Jackson
Sirhal, Alfred M.....(M) Brooklyn
Smith, Dean W.....Jackson
Speck, John W.....Jackson
Southwick, W. A.....(M) Springport
Stewart, L. L.....Jackson
Sugar, Samuel.....(M) Jackson
Susskind, M. V.....(M) Jackson
Tate, Cecil E.....(M) Jackson
Thayer, E. A.....Jackson
Thalner, L. F.....Jackson
Thompson, Tom.....Jackson
Torwick, E. T.....Jackson
Townsend, J. W.....Vandercook Lake
Van Schoick, J. D.....Hanover
Van Shoick, Frank.....Jackson
Van Wagnen, F. I.....(M) Jackson
Vivirski, Edward E.....(M) Jackson
Wallace, Warren S.....(M) Jackson
Wholihan, John W.....Michigan Center
Wickham, W. A.....(M) Jackson
Wilson, N. D.....Jackson
Winter, G. E.....Jackson

Kalamazoo County

Aach, Hugo.....(M) Kalamazoo
Anderson, K. A.....Kalamazoo
Alexander, C. A.....Kalamazoo
Andrews, Sherman.....(M) Memphis, Tenn.
Armstrong, Robert J.....Kalamazoo
Banner, Lawrence R.....Kalamazoo
Barnebee, J. W.....Kalamazoo
Behan, Gerald W.....Galesburg
Benjamin, Margaret.....Kalamazoo
Bennett, C. L.....Kalamazoo
Bennett, Keith.....(M) Kalamazoo
Berry, J. F.....Kalamazoo
Birch, William.....(M) Kalamazoo
Bodmer, H. C.....Kalamazoo
Borgman, Wallace.....(M) Kalamazoo
Boys, C. E.....Kalamazoo
Brown, I. W.....Kalamazoo
Cobb, Horace R.....Kalamazoo
Cook, R. G.....Kalamazoo
Crane, W. B.....Kalamazoo
Crawford, Kenneth.....(M) Kalamazoo
Dahlstrom, Doris.....Kalamazoo
DenBleyker, Walter.....Kalamazoo
DeWitt, L. H.....Kalamazoo
DeWitt, Norman.....(M) Kalamazoo
Dowd, B. J.....(M) Kalamazoo
Doyle, F. M.....(M) Kalamazoo
Ertell, Wm. F.....Kalamazoo
Fast, R. B.....Kalamazoo
Fopeano, John V.....(M) Unknown
Fulkerson, C. B.....Kalamazoo
Fuller, R. T.....Kalamazoo
Fuller, Paul.....(M) Kalamazoo
Gerstner, Louis.....Kalamazoo
Gilding, Joseph.....(M) Vicksburg
Goodhue, Lolita.....Kalamazoo
Grant, Frederick E.....Kalamazoo
Green, William.....Kalamazoo
Gregg, U. Sherman.....Kalamazoo
Heersma, H. S.....Kalamazoo
Hildreth, R. C.....Kalamazoo
Hodgman, Albert B.....(M) Kalamazoo
Hoebeke, William G.....Kalamazoo
Holder, Charles.....(M) Kalamazoo
Howard, H. S.....Kalamazoo

Howard, W. H.....Galesburg
Hubbell, R. J.....Kalamazoo
Huyser, William C.....Kalamazoo
Irwin, Wm. D.....(M) Kalamazoo
Jackson, Howard C.....(M) Kalamazoo
Jackson, John B.....Kalamazoo
Jennings, W. O.....Kalamazoo
Kavanaugh, Wm. R.....(M) Kalamazoo
Kenzie, W. N.....Richland
Klerk, W. J.....(M) Kalamazoo
Koestner, Paul.....(M) Kalamazoo
Kuhs, Milton L.....(M) Kalamazoo
Lambert, R. H.....Kalamazoo
Lang, W. W.....Kalamazoo
Lavender, Howard.....Kalamazoo
Light, Richard Upjohn.....Kalamazoo
Light, S. Rudolph.....Kalamazoo
Littig, John.....Kalamazoo
MacGregor, J. R.....(M) Parchment
Machin, H. E.....(M) Kalamazoo
Malone, James G.....(M) Kalamazoo
Margolis, Frederick J.....Kalamazoo
Marshall, Don.....(M) Kalamazoo
Marshall, Evelyn W.....Kalamazoo
McCarthy, J. S.....Kalamazoo
McIntyre, Charles H.....(M) Kalamazoo
McNabb, A. A.....Kalamazoo
Moe, Carl Rex.....(M) Kalamazoo
Morter, Roy A.....Kalamazoo
Nell, Edward R.....(M) Kalamazoo
Nibbelink, Benjamin.....Kalamazoo
Okun, M. H.....(M) Kalamazoo
Olney, H. E.....Leonidas
Patmos, Martin.....(M) Kalamazoo
Pearson, Edwin O.....Kalamazoo
Peelen, J. W.....(M) Kalamazoo
Peelen, Matthew.....(M) Kalamazoo
Perry, Clifton.....Kalamazoo
Prentice, Hazel R.....Kalamazoo
Prothro, W. B.....Kalamazoo
Rasmussen, Leo.....Vicksburg
Reno, Joseph H.....Kalamazoo
Rigterink, G. H.....(M) Kalamazoo
Rockwell, Donald C.....Kalamazoo
Ryan, F. C.....(M) Kalamazoo
Sage, Edward D.....Kalamazoo
Scholten, D. J.....Kalamazoo
Scholten, Wm.....Kalamazoo
Schrier, C. T.....(M) Kalamazoo
Schrier, Paul.....(M) Kalamazoo
Schrier, Thomas.....(M) Comstock
Scott, Wm. A.....(M) Kalamazoo
Shook, R. W.....(M) Kalamazoo
Siemsen, W. J.....(M) Kalamazoo
Simpson, B. W.....Kalamazoo
Simson, Clyde B.....(M) Kalamazoo
Sisk, W. E.....Kalamazoo
Snyder, Roscoe F.....Kalamazoo
Sofen, Morris B.....(M) Kalamazoo
Stiller, A. F.....Kalamazoo
Southworth, M. N.....(M) Schoolcraft
Stryker, Homer H.....Kalamazoo
Treshler, H. J.....Oshtemo
Upjohn, E. G.....Kalamazoo
Upjohn, L. N.....Kalamazoo
Van Urk, Thomas.....Kalamazoo
Verhage, Martin D.....(M) Kalamazoo
Volderauer, John C.....(M) Chicago, Ill.
Walker, Burt D.....Kalamazoo
Wescott, L. E.....Kalamazoo
Wilbur, E. P.....Kalamazoo
Williamson, Edwin M.....Kalamazoo
Youngs, A. S.....Kalamazoo
Youngs, C. A.....Kalamazoo
Zolen, Margaret.....Kalamazoo

Kent County

Adams, F. A.....(M) Grand Rapids
Aitken, George T.....(M) Grand Rapids
Alfenito, Felix S.....(M) Grand Rapids
Allen, R. V.....Grand Rapids
Aston, William.....(M) Grand Rapids
Avery, Noyes L.....(M) Grand Rapids
Baert, George H.....Grand Rapids
Baker, Abel J.....Grand Rapids
Ballard, M. S.....Grand Rapids
Balyeat, Gordon W.....(M) Grand Rapids
Barris, Ralph W.....(M) West Virginia
Beaton, James H.....(M) Grand Rapids
Beeman, Carl B.....(M) Grand Rapids
Beeman, C. E.....Grand Rapids
Beets, W. Clarence.....(M) Grand Rapids
Bell, Charles M.....(M) Grand Rapids
Bergsma, Stuart.....Grand Rapids
Bettison, William L.....(M) Grand Rapids
Billings, Elton.....Grand Rapids
Blackburn, Henry M.....Grand Rapids
Blocksma, Ralph.....(M) Grand Rapids
Bloxsom, P. W.....Grand Rapids
Boelkins, Richard C.....(M) Grand Rapids
Boet, F. A.....Grand Rapids
Boet, John.....(M) Grand Rapids
Bosch, L. C.....Grand Rapids
Brace, Fred.....(M) Grand Rapids
Brayman, C. W.....Cedar Springs
Brink, Russell.....(M) Grand Rapids
Brook, Jacob D.....Grandville
Brotherhood, J. S.....Grand Rapids
Browning, Eugene.....Grand Rapids
Buesing, O. R.....(M) Unknown
Buist, S. J.....Grand Rapids
Bull, Frank L.....Sparta
Burleson, John S.....Grand Rapids
Burling, Wesley M.....Grand Rapids
Burroughs, Frank.....(M) Overseas
Butler, Wm. J.....Grand Rapids
Byers, Earl J.....Grand Rapids
Byrd, Mary Lou.....Grand Rapids
Campbell, Alexander M.....Grand Rapids
Carpenter, L. C.....(M) Grand Rapids
Chadwick, W. L.....(M) Denver, Colo.
Chamberlain, L. H.....Grand Rapids
Chandler, Donald.....Grand Rapids
Claytor, R. W.....Grand Rapids
Collisi, H. S.....(M) Grand Rapids
Colvin, W. G.....(M) Grand Rapids
Corbus, B. R.....Grand Rapids
Crane, Charles V.....Grand Rapids
Crane, Harold D.....(M) Grand Rapids
Cuncannan, M. E.....Grand Rapids
Dales, Ernest W.....Grand Rapids
Damstra, H. J.....(M) Grand Rapids
Davis, D. B.....(M) Grand Rapids
Dawson, Douglas.....(M) Grand Rapids
Dean, Alfred W.....Grand Rapids
DeBoer, Clarence J.....(M) Grand Rapids
DeBoer, Guy Wm.....(M) Grand Rapids
DeMaagd, Gerald.....Rockford
DeMol, Richard J.....Grand Rapids
Denham, R. H.....Grand Rapids
Denham, Robert H., Jr...(M) Ann Arbor
De Pree, Isla G.....Grand Rapids
De Pree, Joseph.....Grand Rapids
Devel, Leon.....(M) Grand Rapids
DeVries, Daniel.....(M) Augusta, Ga.
Dewar, M. M.....Grand Rapids
Dewey, Kent A.....Grand Rapids
De Young, T.....Sparta
Dick, Mark W.....(M) Grand Rapids
Diskey, Donald.....Grand Rapids
Dixon, Willis L.....Grand Rapids
Doran, Frank L.....Grand Rapids
Droste, James C.....Grand Rapids
Ducey, Edward F.....Grand Rapids
Duiker, Henry.....Grand Rapids
Deurloo, H. W.....(M) Godwin Heights
Eaton, Robert M.....(M) Grand Rapids
Eggleston, H. R.....Grand Rapids
Failing, John F.....(M) Grand Rapids
Fannoff, Fred L.....Grand Rapids
Farber, Charles E.....(M) Grand Rapids
Faust, L. W.....Grand Rapids
Fellows, Kenneth E.....(M) Grand Rapids
Ferguson, James.....(M) Ann Arbor
Ferguson, Lynn A.....Grand Rapids
Ferguson, Ward S.....Grand Rapids
Ferrand, L.....(M) Rockford
Fitts, Ralph L.....(M) Grand Rapids
Flynn, J. D.....(M) Grand Rapids
Foshee, J. C.....Grand Rapids
Frevling, Robert.....(M) Unknown
Fuller, E. H.....Grand Rapids
Gaikema, E. W.....Grand Rapids
Gibbs, F. F.....Grand Rapids
Gilbert, R. H.....Grand Rapids
Gillette, Frederics.....(M) Grand Rapids
Grant, Lee O.....Grand Rapids
Grant, Lucile.....Grand Rapids
Grass, Edward J.....(M) Grand Rapids
Graybiel, George.....Caledonia
Griffith, L. S.....(M) Grand Rapids
Haeck, William.....(M) Grand Rapids
Hagerman, D. B.....Grand Rapids
Hammond, T. W.....(R) Grand Rapids
Hayes, L. W.....Howard City
Heetderks, Dewey.....Grand Rapids
Henry, James, Jr.....Grand Rapids
Herrick, Ruth.....Grand Rapids
Hill, A. Morgan.....(M) Grand Rapids
Hodgen, J. T.....Grand Rapids
Holcomb, J. W.....Grand Rapids
Holdsworth, M. J.....(M) Grand Rapids
Holkeboer, Henry D.....Grand Rapids
Hollander, Stephen.....(M) Grand Rapids
Hoogerhyde, Jack.....(M) Grand Rapids
Houghton, G. D.....Caledonia
Hufford, A. R.....Grand Rapids
Hutchinson, Robert J.....Grand Rapids
Hyland, W. A.....Grand Rapids
Ingersoll, C. F.....(M) Grand Rapids
Jack, William.....(M) Grand Rapids
Jellema, J. F.....Grand Rapids
Jameson, Fred M.....(M) Chicago, Ill.
Jaracz, W. J.....Grand Rapids
Jarvis, Charles.....Grand Rapids
Kelly, Robert E.....(M)
Kemmer, Thomas R.....Grand Rapids
Kendall, Eugene L.....Grand Rapids
Klaus, C. D.....(M) Grand Rapids
Kniskern, P. W.....(M) Grand Rapids
Kooistra, Henry P.....Grand Rapids
Koon, William D.....(M) Grand Rapids
Koontz, E. R.....(M) Grand Rapids
Kremer, John.....Grand Rapids
Kreulen, H. J.....Grand Rapids
Kriekard, P. J.....Grand Rapids
Laird, Robert G.....Grand Rapids
Lamb, George F.....Grand Rapids
Lanning, N. E.....Grand Rapids
Lawrence, Howard C.....Grand Rapids
Lentini, Joseph R.....(M) Grand Rapids
Le Roy, Simeon.....Grand Rapids
Lieffers, Harry.....Grand Rapids
Lindenfeld, Frederick H.....(M) Grand Rapids
Logie, James W.....Grand Rapids
Lyman, William D.....Grand Rapids
MacDonald, Allen.....(M) Lowell
Mac Donnell, James A.....(M) Lowell
Marrin, M. M.....(M) Grand Rapids
Marsh, J. P.....Grand Rapids
Martin, A. M.....Grand Rapids
Maurits, Reuben.....Grand Rapids
McCandliss, Robert.....Grand Rapids
McCormick, John.....(M) Grand Rapids
McDougal, Wm. J.....Grand Rapids
McDougall, Clarice.....Grand Rapids
McKenna, J. L.....(M) Grand Rapids
McKinley, L. M.....Grand Rapids
McRae, John H.....Grand Rapids
Mehney, Gayle H.....Grand Rapids
Miller, J. Duane.....(M) Grand Rapids
Miller, John J.....Marne
Mitchell, H. C.....(M) Grand Rapids
Mitchell, Joseph D., Jr.....Grand Rapids
Mitchell, W. B.....Grand Rapids
Moen, Cornetta G.....Grand Rapids
Moleski, Joseph.....(M) Grand Rapids
Moleski, Leo.....(M) Grand Rapids
Moleski, Stanley.....Grand Rapids
Moll, Arthur M.....Grand Rapids
Morey, Edward C.....Grand Rapids
Mouw, Dirk.....(M) Grand Rapids
Mulder, J. D.....Grand Rapids
Murphy, M. J.....(M) Grand Rapids
Nelson, A. R.....(M) San Francisco, Cal.
Noordewier, Albert.....Grand Rapids
Notier, Victor.....Grand Rapids
Oliver, W. W.....Grand Rapids
Olson, John R.....(M) Grand Rapids
Osborn, Howard.....Grand Rapids
Paalman, Russell J.....(M) Ft. Leavenworth, Kans.
Patterson, P. Wilfred.....Grand Rapids
Payne, C. Allen.....(M) Grand Rapids
Pearson, Glenn A.....Grand Rapids
Pedden, J. R., Jr.....Grand Rapids
Postma, Edward Y.....(M) Grand Rapids
Posthuma, A. E.....Grand Rapids
Posthuma, Millard.....(M) Grand Rapids
Pott, A. L.....(M) Grand Rapids
Pyle, Henry J.....Grand Rapids
Ragsdale, L. V.....Grand Rapids
Ralph, L. Paul.....(M) Grand Rapids
Reed, Torrance.....Grand Rapids
Reus, William F.....Grand Rapids
Rigterink, J. W.....Grand Rapids
Riley, G. L.....Grand Rapids
Robb, Charles S.....Grand Rapids
Roberts, Mortimer E.....Grand Rapids
Robinson, Harold.....Grand Rapids
Rodgers, William L.....Grand Rapids
Rogalski, F. L.....(M) Grand Rapids
Roth, Emil M.....(M) Grand Rapids
Schaubel, Howard J.....(M) Grand Rapids
Schermerhorn, L. J.....Grand Rapids
Schuitema, Donald.....(M) Grand Rapids
Schnoor, E. W.....Grand Rapids
Schnute, Louise F.....Grand Rapids
Sculley, Ray E.....(M) Grand Rapids
Sevensma, Elisha S.....(M) Grand Rapids
Sevey, L. E.....Grand Rapids
Shepard, B. H.....Lowell
Shellman, Millard W...(M) Grand Rapids
Sherwood, J. Vincent.....Grand Rapids
Sidell, Richard H.....Grand Rapids
Slemons, C. C.....Grand Rapids
Sluyter, J. S.....(M) Grand Rapids
Smith, A. B.....Grand Rapids
Smith, Edwin M.....Grand Rapids
Smith, Ferris N.....Grand Rapids
Smith, R. Earle.....Grand Rapids
Snyder, Clarence.....Grand Rapids
Southwick, G. Howard.....Grand Rapids
Steffensen, W. H.....(M) Grand Rapids

Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....(M) Grand Rapids
Stuart, Gerhardus.....Grand Rapids
Sugg, Cullen E.....Grand Rapids
Sus Strong, Carl A.....Grand Rapids
Swenson, H. C.....(M) Grand Rapids
Swenson, Leland.....(M) Grand Rapids
Ten Have, J.....Grand Rapids
Tesseine, A. J.....(M) Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, A. B.....(E) Grand Rapids
Thompson, Athol B.....Grand Rapids
Thompson, Edward.....(M) Grand Rapids
Thompson, P. L.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Joseph C.....Grand Rapids
Torgerson, Wm. R.....Grand Rapids
Truog, Clarence P.....Grand Rapids
Van Belois, Harvard J.....Grand Rapids
Van Bree, R. S.....Grand Rapids
Vanden Berg, Henry J.....Grand Rapids
Vander Meer, Ray.....(M) Grand Rapids
VanDuine, H. J.....Byron Center
Van Harn, R. S.....Grand Rapids
Vann, N. S.....Grand Rapids
Van Noord, Gelmer A.....Grand Rapids
Van't Hof, A.....(M) Grand Rapids
Van Solkema, Andrew.....Grand Rapids
Van Solkema, Arthur.....(M) Grandville
Van Woerkom, Daniel.....Grand Rapids
Van Zwaluwenberg, Benjamin.....(M) Grand Rapids
Veldman, Harold E.....Grand Rapids
Venema, J. R.....Grand Rapids
Ver Meulen, John.....Grand Rapids
Vis, William R.....Grand Rapids
Vyn, J. D.....Grand Rapids
Webber, Jerome.....(M) Grand Rapids
Wedgewood, L. G.....Grandville
Wells, Merrill.....Grand Rapids
Wenger, Aaron V.....Grand Rapids
Wenger, John N.....Coopersville
Whalen, John.....(M) San Diego, Calif.
Whinery, Joseph B.....Grand Rapids
Whinery, Joseph F.....(M) Grand Rapids
Wiggers, J. R.....Grand Rapids
Willits, P. W.....Grand Rapids
Wilson, Wm. E.....(R) Grand Rapids
Winter, Garrett E.....Grand Rapids
Wright, Thomas E.....Grand Rapids
Wurz, John F.....(M) Grand Rapids
Yegge, J. P.....Kent City

Lapeer County

Best, Herbert M.....Lapeer
Bishop, G. C.....Almont
Burley, David H.....(E) Almont
Chapin, Clarence D.....Columbiaville
Cooper, E. R.....Lapeer
Dorland, Clarke.....(M) Lapeer
Jackson, Carl C.....(M) Texas
McBride, J. R.....(M) Lapeer
Merz, Henry G.....(E) Lapeer
O'Brien, Daniel J.....Lapeer
Rehn, Adolph T.....Lapeer
Smith, G. L.....Imlay City
Thomas, J. Orville.....North Branch
Tinker, F. A.....(E) Lapeer
Zemmer, H. B.....Lapeer
Zolliker, Carl R.....Imlay City

Lenawee County

Abraham, A. O.....Hudson
Blair. Thomas H.....Adrian
Blanchard, L. E.....Hudson
Blanden, Merwin R.....Tecumseh
Campbell, C. A.....(M) Unknown
Colbath, W. E.....Adrian
Claxton, W. T.....(M) Britton
DeRyke, Gilbert R.....Adrian
Hammel, H. H.....(M) Tecumseh
Hardy, P. B.....Tecumseh
Heffron, Howard H.....Adrian
Helzerman, Ralph F.....(M) Tecumseh
Hewes, A. B.....Adrian
Hewes, William.....(M) Adrian
Hinshaw, W. V.....(M) Adrian
Hornsby, W. B.....Clinton
Howland, F. A.....Adrian
Jewett, Wm. E., Jr.....Adrian
Lamley, A. E.....Blissfield
Loveland, Horace H.....Tecumseh
MacKenzie, W. S.....Adrian
McCue, Francis J., Jr.....(M) Adrian
McCue, F. J., Sr.....Hudson
Mac Kenzie, W. S.....Adrian
Marsh, R. G. B.....(M) Tecumseh
Miller, Perry Lynford.....(M) Adrian
Morden, Esli T.....Adrian
Pasternacki, Arthur S.....(M) Adrian
Patmos, Bernard.....(M) Adrian
Raabe, E. C.....Morenci
Rawson, A. P.....(M) Addison
Rogers, J. D.....(M) Adrian
Sayre, Phillip P.....Onsted
Spalding, I. L.....Hudson
Stafford, Leo J.....Adrian
Tubbs, R. V.....Blissfield
Van Dusen, C. A.....Blissfield
Wynn, G. H.....(M) Adrian

Livingston County

Cameron, Duncan A.....(M) Brighton
Coughlin, Florence J.....Howell
Crandell, Claire H.....Howell
Duffy, Ray M.....Pinckney
Finch, E. D.....Howell
Glenn, Bernard H.....Fowlerville
Hayner, R. A.....(M) Kalamazoo
Hendren, J. J.....Fowlerville
Hill, Harold C.....(M) Howell
Huntington, H. G.....Howell
Laboe, Edward W.....Howell
Leslie. G. L.....(M) Howell
Lieber, R. W.....Howell
McGregor, Archie J.....Brighton
McDowell, Guy Marshall.....Howell
Rednor, Daniel J.....Howell
Sigler, Hollis L.....Howell
Stephens, D. C.....(M) Howell
Whitehouse, Walter M.....Howell

Luce County

Adams, DeWitt C.....Newberry
Campbell, Earl H.....Newberry
Gibson, Robert E.....Newberry
Koss, Frank R.....(M) Newberry
Kronquist, Laura D.....Newberry
Lance, Paul E.....Mariette
Purmort, William R., Jr.....Newberry
Spinks, Robert E.....Cadillac
Surrell, Mathew A.....(M) Newberry
Swanson, George F.....(M) Newberry
Tuttle, Jay F.....(M) Falls City, Wash.

Macomb County

Banting, O. F.....(M) Richmond
Barker, John G.....Centerline
Bower, A. B.....Armada
Brady, Milo J.....St. Clair Shores
Buckley, D. J.....Mt. Clemens
Crawford, A. M.....Romeo
Croman, Joseph M., Jr.....Mt. Clemens
Croman, Joseph M., Sr.(E) Mt. Clemens
Dudzinski, Edmund J.(M) New Baltimore
Engels, J. A.....Richmond
Reine, A.....Mt. Clemens
Isbey, Edward K.....Centerline
Juliar, Joseph F.....(M) Mt. Clemens
Kane, Wm. J.....Mt. Clemens
Lane, W. D.....Romeo
La Riviere, J. O.....(M) Mt. Clemens
Lynch, Russell E.....Centerline
Maguire, A. J.....(M) Utica
Moore, G. F.....Mt. Clemens
Mulligan, P. T.....(M) Mt. Clemens
Parker, B. Morgan.....Utica
Reichman, Joseph J.....Mt. Clemens
Reitzel, R. H.....Mt. Clemens
Rivard, Charles L.....(M) St. Clair Shores
Roth, G. E.....(M) Almont
Ruedisueli, Clarence A.....Roseville
Rothman, A. M.....(M) East Detroit
Salot, R. F.....(M) Mt. Clemens
Scher, Joseph N.....(M) Mt. Clemens
Scher, Sydney.....(M) Mt. Clemens
Sibrans, William A.....Sumter, S. C.
Siegfried, E. G.....New Haven
Smith, Milton C.....Mt. Clemens
Stone, Elizabeth A.....(M) Romeo
Sturm, Fred A.....St. Clair Shores
Thompson, A. A.....Mt. Clemens
Ullrich, R. W.....Mt. Clemens
Wellard, Henry C.....(M) New Baltimore
Whitley, Alec.....St. Clair Shores
Wilde, M. M.....Warren
Wiley, D. Bruce.....Utica
Wolfson, Victor H.....Mt. Clemens

Manistee County

Grant, C. L.....Manistee
Hansen, E. C.....(M) Manistee
Harr, R. V.....(M) Santa Rosa, Calif.
Konopa, John F.....(M) Manistee
Lewis, Lee A.....Manistee
Miller, E. B.....Manistee
Norconk, Ward H.....Bear Lake
Oakes, Ellery A.....Manistee
Ogilvie, G. D.....(M) Manistee
Quinn, Henry M.....Copemish
Ramsdell, Homer A.....Manistee
Switzer, Lars W.....Manistee

Marquette-Alger Counties

Bennett, Arthur K.....Marquette
Bennett, M. C.....(M) Marquette
Berry, Robert F.....Marquette
Bertucci, J. P.....Ishpeming
Burke, R. A.....Negaunee
Bottum, Charles N.....Marquette
Casler, W. L.....Marquette
Cooperstock, M.....Marquette
Corcoran, W. A.....Ishpeming
Drury, Chas. P.....Marquette
Elzinga, E. R.....Marquette
Erickson, Arvid W.....Ishpeming
Fennig, F. A. .....(M) Marquette
Hanelin, H. A.....(M) Chicago, Ill.
Hartt, P. P.....Ishpeming
Hirwas, C. L.....Marquette
Hornbogen, D. P.....(M) Marquette
Howe, L. W.....Marquette

Janes, R. Grant.....(M) Detroit
Keskey, George I.....Marquette
Lambert, W. C.....(M) Marquette
LeGolvan, C.....Marquette
McCann, Neal J.....Marquette
Mudge, W. A.....Negaunee
Narotzky, Archie S.....Ishpeming
Nicholson, J. B.....(M) Marquette
Niemi, O. I.....(M) Marquette
Paine, C. A.....(M) Ishpeming
Schutz, W. J.....(M) Chiscago, Ill.
Schweinsberg, Sara D.....Marquette
Serbst, Charles.....(M) Marquette
Sicotte, Isaiah.....Michigamme
Talso, Jacob.....Ishpeming
Van Riper, Paul.....Champion
Waldie, George McLeod.....Ishpeming
Wickstrom, Geo.....Munising
Williams, R. G.....Ishpeming

Mason County

Blanchette, Victor J.....Scottville
Comodo, Nicholas M.....(M) Ludington
Goulet, L. J.....Ludington
Hoffman, Howard.....(M) Ludington
Hunt, Ivan L.....Scottville
Lintner, Roy C.....Ludington
Martin, Wm. S.....Ludington
Ostrander, R. A.....(M) Ludington
Paukstis, Charles.....Ludington
Scott, Robert R.....(M) Ludington

Mecosta-Osceola-Lake County

Bruggema, Jacob.....Evart
Chess, Leo F.....Reed City
Franklin, Benjamin L.....Remus
Ivkovich, Paul.....(M) Reed City
Kilmer, Paul B.....Reed City
Klein, J. Paul.....(M) Reed City
MacIntyre, Donald.....Big Rapids
McGrath, V. J.....Reed City
Merlo, F. A.....Big Rapids
Peck, Louis K.....Lake City
Phillips, R. W.....(M) Remus
Treynor, Thomas P.....Big Rapids
White, J. A.....Big Rapids
Yeo, Gordon H.....Big Rapids

Menominee County

Brukhardt, Herman R.....(M) Menominee
DeWane, F. J.....Menominee
Flanagan, Clarence B.....Menominee
Glickman, L. G.....(M) Menominee
Heidenreich, John R.....(M) Daggett
Jones, Wm. S.....Menominee
Kaye, J. T.....Menominee
Kerwell, K. C.....Stephenson
Peterson, A. R.....Daggett
Sanford, Joseph.....Stephenson
Sawbridge, Edward.....(E) Stephenson
Sethney, Henry T.....Menominee
Sethney, Walter F.....(M) Tulsa, Okla.
Towey, J. W.....Powers

Midland County

Ballmer, Robert S.....Midland
Bowsher, Robert E.....(M) Midland
Bulmer, Daniel J.....(M) Midland
Buskirk, Maurice D.....(M) Midland
Gay, Harold Howard.....Midland
Gordon, Harold L.....(M) Midland
Grewe, N. C.....Midland
Hautau, Emily.....Midland
Linsenmann, Karl W.....Midland
MacCallum, Charles.....Midland
Maynard, W. A.....Coleman
Meisel, Edward H.....(M) Midland
Pike, Melvin H.....Midland
Rice, Robert E.....Midland
Sherk, J. H.....Midland
Sjolander, Gust.....Midland
Towsley, W. D.....Midland
Von Haitinger, Kalmon.....(M) Midland

Monroe County

Acker, Wm. F.....Monroe
Ames, Florence.....Monroe
Balk, A. C.....Monroe
Barker, Vincent L.....(M) Monroe
Blakey, L. C.....Monroe
Bond, W. W.....(M) Monroe
Brancheau, L. T.....(M) Petersburg
Cohen, H. Herbert.....(M) Monroe
Denman, D. C.....(M) Maywood, Calif.
Dusseau, S. V.....(E) Erie
Ewing, R. T.....Monroe
Fieldhouse, B. J.....Lansing, Illinois
Flanders, J. P.....(M) Monroe
Gelhaus, Wm. J.....Monroe
Golinvaux, C. J.....Monroe
Goodman, Louis.....(M) Detroit
Heffernan, John F.....Carleton
Hensel, Hilda.....Monroe
Humphrey, J. A.....Monroe
Hunter, M. A.....Monroe
Johnson, A. Esther.....Monroe
Landon, Herbert W.....Monroe
Lindquist, Paul A.....(M) Alaska
Long, Edgar C.....(M) Monroe
Long, Sara.....Monroe
Mather, C. B.....(M) Monroe
McDonald, T. A.....Monroe
McGeoch, R. W.....Monroe
McMillin, J. H.....Monroe
Meck, H. L.....Dundee
Medlar, Robert.....(M) Monroe
Newcomer, Sheldon R.....Monroe
Parmelee, O. E.....Lambertville
Pinkus, Hermann.....Monroe
Reisig, A. H.....(M) Monroe
Sanger, Emerson J.....Monroe
Tomlinson, Ledyard.....Newport
Vaughn, Morley S.....Carleton
Wagar, Spencer.....Rockwood
Williams, Robert J.....(M) Monroe
Williamson, George W.....Dundee

Muskegon County

Anderson, A. J.....Muskegon
Anderson, Axel W.....Muskegon
August, R. V.....Muskegon Hts.
Barnard, Helen.....Muskegon
Bate, L. C.....Muskegon
Beers, Charles.....Muskegon Hts.
Benedict, A. L.....(M) Muskegon
Bloom, C. J.....Muskegon
Boyd, D. R.....Muskegon
Boyd, John.....(M) Muskegon
Bradshaw, Park S.....Muskegon
Chapin, William S.....Muskegon Hts.
Christophersen, J. W.....(M) Muskegon
Clapp, H. W.....(M) Muskegon
Closz, H. F.....Muskegon
Cohan, Sol G.....Muskegon
Dasler, A. F.....(M) Unknown
Derezinski, Clement F.....Muskegon
Diskin, Frank.....(M) Muskegon
Douglas, Robert.....(M) Muskegon
Durham, C. J.....Muskegon
Dykhuisen, Harold D.....Muskegon
Eckerman, C. T.....Muskegon
Fillingham, Enid.....Muskegon
Fleischman, C. B.....Muskegon
Fleishman, Norman.....(M).... Muskegon
Foss, Edward O.....Muskegon
Garber, F. W., Jr.....Muskegon
Garland, J. O.....Muskegon
Gillard, James.....(M) Muskegon
Griffith, Robert M.....(M) Muskegon
Hagen, William A.....Muskegon
Hannum, F. W.....Muskegon
Harrington, A. F.....Muskegon
Hartwell, S. W.....(M) Muskegon
Heneveld, Edw. H.....(M) Muskegon
Heneveld, John.....Muskegon
Holly, Leland E.....Muskegon
Holmes, Roy Herbert.....(M) Muskegon
Kane, Thomas J.....(M) Muskegon
Kay, Cecilia.....Muskegon
Keilin, Marie.....Muskegon
Kerr, H. J.....(M) Muskegon
Lange, E. W.....Muskegon
Lauretti, Emil.....Muskegon
Laurin, V. Samuel.....Muskegon
LeFevre, Louis.....(M) Muskegon
LeFevre, William M.....Muskegon
Loder, Leonel Lewis.....Muskegon
Loomis, John L.....Muskegon
Mandeville, C. B.....Muskegon
Medema, Paul.....Muskegon
Meengs, M. B.....(M) Muskegon
Miller, Philip L.....(M) Muskegon
Morford, F. N.....Muskegon
Mulligan, A. W.....Muskegon
Oden, Constantine L.....Muskegon
Petkus, Antonie.....Muskegon Hts.
Pettis, Emmett.....Muskegon
Powers, Lunette.....Muskegon
Price, Leonard.....(M) Unknown
Pyle, H. J.....Muskegon
Risk, Robert A.....Muskegon
Risk, Robert D.....(M) Muskegon Hts.
Scholle, N. W.....(M) Muskegon
Ryan, Wm. J. J.....Muskegon
Sears, Richard.....Muskegon
Swartout, W. C.....Muskegon
Teifer, Charles A.....Muskegon
Thieme, S. W.....Ravenna
Thornton, E. S.....Muskegon
Wagenaar, R. H.....(M) Muskegon
Wiersma, Silas C.....Muskegon
Wilke, C. A.....Montague
Wilson, P. S.....Muskegon

Newaygo County

Deur, T. R.....Grant
Geerlings, Lambert.....Fremont
Geerlings, Willis.....Fremont
Moore, H. R.....Newaygo
O'Neill, J. W.....White Cloud
Stryker, O. D.....Fremont
Tompsett, Arthur C.....Hesperia

Northern Michigan

Beuker, Bernard J.....East Jordan
Blum, Benjamin B.....(M) Petoskey
Burns, Dean C.....Petoskey
Chapman, Willis.....(E) Cheboygan
Conkle, Guy C.....Boyne City
Conti, Joseph.....(M) Petoskey
Conway, Wm. S.....(M) Petoskey
Duffie, Don Hastings.....Central Lake
Frank, Gilbert E.....Harbor Springs
Gervers, J. H. R.....Bellaire
Giffords, Mark....(M) Los Angeles, Calif.
Hegener, A. J.....Petoskey
Larson, Walter E.....Cheboygan
Lashmet, Floyd H.....Petoskey
Lentini, Nicholas.....Cheboygan
Lilga, Harris V.....(M) Petoskey
Litzenburger, A. F.....Boyne City
Mast, W. H.....Petoskey
Mayne, Frederick C.....Cheboygan
McCune, Wm. Stanley.....(M) District of Columbia
McLeod, M. M.....Sanford, N. C.
McMillan, Fraley.....Charlevoix
Palmer, Russell.....St. James
Parks, W. H.....Petoskey
Rodgers, John.....Bellaire
Saltonstall, G. B.....Charlevoix
Stringham, J. R.....Cheboygan
Van Dellen, Jerrian.....E. Jordon
Weberg, Kathryn.....Petoskey
Wood, George.....Onaway

Oakland County

Abbott, V. C.....(M) Pontiac
Arnkoff, Harry.....Pontiac
Aschenbrenner, Z. R.....Farmington
Baker, Frederick A.....Pontiac
Baker, Robert H.....Pontiac
Barker, Howard B.....Pontiac
Barrow, Winona M.....Royal Oak
Bauer, Edward G.....Pontiac
Bauer, Ernest W.....Hazel Park
Beattie, W. G.....Ferndale
Beck, Otto O.....Birmingham
Benning, C. H.....(M) Royal Oak
Berg, Richard H.....Oxford
Berkaw, Kenneth H.....Birmingham
Blue, Jane.....Pontiac
Borland, Alexander.....Pontiac
Boucher, R. E.....(M) Royal Oak
Bourg, Donald J.....Royal Oak
Burke, Chauncey G.....Pontiac
Butler, Samuel A.....Pontiac
Calhoun, Ethel T.....Birmingham
Campbell, Malcolm D.....(M) Royal Oak
Christie, E. A.....Pontiac
Christie, J. W.....(M) Pontiac
Cobb, Leon F.....Pontiac
Cobb, Thomas H.....Pontiac
Cooper, Robert J.....(M) Pontiac
Crissman, Harold C.....Ferndale
Cudney, Ethan B.....Pontiac
Dahlgren, Carl.....Keego Harbor
Darling, C. G., Jr.....Pontiac
Dobski, Edwin J.....(M) Pontiac
Ekelund, Clifford T.....Pontiac
Farnham, Lucius Augustine.....Pontiac
Faulconer, Albert.....(M) Rochester
Ferris, Ralph G.....Birmingham
Fitzpatrick, Francis.....Pontiac
Flick, Earl J.....(M) Royal Oak
Flick, John R.....Royal Oak
Foust, Earl W.....(M) Hazel Park
Francis, Donald.....(M) Pontiac
Furlong, Harold A.....(M) Pontiac
Gaensbauer, Ferdinand.....Pontiac
Gariepy, Bernard F.....Royal Oak
Gatley, C. R.....(M) Pontiac
Gatley, L. Warren.....Pontiac
Geib, Ormond D.....Rochester
Gehringer, Norman F.....(M) Pontiac
Gerls, Frank B.....Pontiac
Gibson, Wellington C.....Milford
Gill, Matthew J.....(M) Pontiac
Gordon, J. H.....Birmingham
Grant, William A.....Milford
Grate, L.....(M) Pontiac
Green, Wm. M.....Pontiac
Hackett, Daniel Jos.....Pontiac
Haddock, D. A.....Walled Lake
Halsted, Lee H.....Farmington
Hammonds, E. E.....(M) Birmingham
Harvey, Campbell.....Pontiac
Hasner, R. B.....Royal Oak
Hassberger, J. B.....(M) Birmingham
Hathaway, Clarence L.....Lake Orion
Hathaway, William.....Rochester
Henry, Colonel R.....Ferndale
Hensley, C. B.....Lake Orion
Howlett, E. V.....Pontiac
Hoyt, D. F.....(M) Pontiac
Hubert, John R.....(M) Pontiac
Hume, T. W. K.....Auburn Hts.
Hunt, Homer H.....Pontiac
Hurst, Daniel D.....Pleasant Ridge
Hutchinson, W. G.....Bloomfield Hills
Kemp, Felix J.....Pontiac
Kemp, W. Lloyd.....Birmingham
Kimball, A. S.....Pontiac
Koehler, William H.....Royal Oak
Lambie, John S.....Birmingham
Lambert, Alvin Gerald.....Ferndale
Larson, B. T.....Pontiac
Lass, E. H.....(M) Oxford
Lewis, S. M.....Ferndale
Little, J. W.....(M) Pontiac
Lockwood, C. E.....Holly
MacKenzie, O. R.....Walled Lake
Margrave, Edmund C.....Royal Oak
Markley, John Martin.....(M) Pontiac
Mason, Robert J.....(M) Birmingham
McConkie, J. P.....Birmingham
McEvoy, Francis J.....(M) Royal Oak
McNeill, H. H.....Pontiac
Mehas, C. P.....Pontiac
Meinke, Herman A.....Hazel Park
Mercer, Frank A.....Pontiac
Merrill, Lionel N.....Royal Oak
Mershon, R. B.....Royal Oak
Mitchell, B. M.....Pontiac
Monroe, John D.....Pontiac
Neafie, Chas. A.....Pontiac
Newcomb, Arnold B.....Berkley
Norup, John.....Berkley
Nosanchuk, Joseph.....(M) Pontiac
Ohlmacher, A. P.....(M) Royal Oak
Olsen, Richard E.....(M) Pontiac
Palmer, Fred W.....Pontiac
Pauli, Theodore H.....(M) Pontiac
Pelletier, Charles J.....(M) Hazel Park
Pool, H. H.....Pontiac
Porritt, Ross J.....(M) Pontiac
Ports, Preston W.....Farmington
Prevette, Isaac C.....Pontiac
Raynale, George P.....Birmingham
Reid, Fred T.....Clawson
Riggs, Harry L.....Pontiac
Riker, Aaron D.....Pontiac
Roehm, Harold R.....Birmingham
Ross, Worth.....Bloomfield Hills
Rowley, Laurie G.....Drayton Plains
Russell, Vincent P.....(M) Royal Oak
St. John, Harold A.....Pontiac
Schlecte, Carl.....(M) Rochester
Schlecte, Eve Mirian.....Rochester
Schoenfeld, John B...(M) Bloomfield Hills
Schuneman, Howard.....Ferndale
Seaborn, A. J.....Royal Oak
Shadley, Maxwell.....(M) Plymouth
Sheffield, L. C.....Pontiac
Sibley, Harry A.....Pontiac
Simpson, E. K.....Pontiac
Smith, Carleton A.....(M) Pontiac
Smith, Donald S.....(M) Pontiac
Smith, Ellen.....Pontiac
Spencer, Lloyd H.....(M) Ferndale
Spoehr, Eugene L.....Ferndale
Spohn, Earl W.....(M) Royal Oak
Stahl, Harold F.....Oxford
Stanley, Wm. F.....(M) Ferndale
Starker, Clarence T.....Pontiac
Steinberg, Norman.....Royal Oak
Stofer, Bert E.....Detroit
Stolpman, A. K.....(M) Birmingham
Sutton, Palmer E.....Royal Oak
Swickle, Edward F.....Royal Oak
Tauber, A.....Pontiac
Tuck, Raymond G.....Pontiac
Uloth, Milton J.....Ortonville
Van Holtern, H. L.....Pontiac
Wagley, P. V.....(M) Pontiac
Wagner, Ruth E.....Royal Oak
Warner, J. F.....Detroit
Watson, Thomas J.....(M) Birmingham
Wentz, A. E.....(M) Birmingham
Young, Arthur R.....Pontiac

Oceana County

Flint, Charles.....(M) Hart
Hayton, A. R.....Shelby
Heard, William.....Pentwater
Heysett, N. W.....Pentwater
Jensen, Viggo.....Shelby
Lemke, Walter M.....(M) Pennsylvania
Munger, L. P.....Hart
Nicholson, John H.....Hart
Robinson, W. Gordon.....(M) Hart
Wood, Merle G.....Hart

Medical Society of North Central Counties

Ballard, Sylvester L.....Grayling
Clippert, C. G.....Grayling
Coulter, Keith D.....Gladwin
Drescher, George A.....Lewiston
Egle, Joseph L.....Gaylord
Harris, Levi A.....(E) Gaylord
Hendricks, H. V.....Kalkaska
Jardine, Hugh M.....West Branch
Keyport, C. R.....Grayling
Martzowka, M. A.....Roscommon
McDowell, Douglas B.....(M) West Branch
McKillop, G. L.....Gaylord
Palm, Geo. W.....Prudenville
Peckham, Richard C.....Gaylord
Stealy, Stanley A.....Grayling

Ontonagon County

Bender, Jesse L.....Mass
Easterly, Clay E.,.....(M) Ontonagon
Hogue, H. B.....Ewen
Rubinfeld, S. H.....(M) Ontonagon
Strong, W. F.....Ontonagon

Ottawa County

Beernink, E. H.....Grand Haven
Bloemendaal, D. C.....Zeeland
Bloemendal, W. B.....Grand Haven
Boone, Cornelius E.....Zeeland
Clark, Nelson H.....(M) Holland
Cook, Carl S.....(M) Holland
Costello, C. V.....Holland
DeVries, H. G.....Holland
DeYoung, Fred.....(M) Spring Lake

Hager, Ralph.....(M) Hudsonville
Hamelink, M. H.....Holland
Harms, H. P.....(M) Holland
Kemme, Gerrit.....Zeeland
Kitchel, John.....Grand Haven
Kitchel, Mary.....Grand Haven
Kools, William C.....Holland
Leenhouts, Abraham.....(E) Holland
Long, C. E.....Grand Haven
Nichols, Rudolph H.....Holland
Nykamp, Russell.....Zeeland
Presley, Wm. J.....Grand Haven
Rypkema, Willard M.....(M) Muskegon
Schrick, Edna C.....Holland
Stickley, A. E.....Coopersville
Ten Have, Ralph.....Grand Haven
Timmerman, E. C.....(M) Coopersville
Van Appledorn, Chester J.....Holland
Van Der Berg, E.....Holland
Van der Velde, O.....Holland
Wells, Kenneth.....(M) Spring Lake
Westrate, William.....Holland
Winter, John K.....Holland
Winter, Wm. G.....(M) Holland
Yonkman, Frederick F.....Holland

Saginaw County

Ackerman, G. L.....(M) Saginaw
Bagley, U. S.....Saginaw
Bagshaw, David E.....Saginaw
Berberovich, T. F.....Saginaw
Bishop, H. M.....(M) Saginaw
Brender, Fred P.....Frankenmuth
Bruton, Martin F.....Saginaw
Bullington, Bert M.....(M) Saginaw
Busch, Frank J.....Saginaw
Butler, M. G.....(M) San Francisco
Button, A. C.....Saginaw
Cady, F. J.....Saginaw
Cameron, Allen K.....Saginaw
Campbell, L. A.....Saginaw
Catizone, R. J.....Merrill
Chisena, Peter R.....(M) Bridgeport
Clark, Wilbert B.....Kenmore, N. Y.
Claytor, Archer A.....Saginaw
Cortopassi, Andre.....Saginaw
Cortopassi, V. E.....(M) Saginaw
Cory, C. W.....(M) Saginaw
Curts, James.....(M) Saginaw
Ely, C. W.....Saginaw
Ernst, Arthur R.....Saginaw
Eymer, Esther.....Saginaw
Fleschner, Thomas E.....Birch Run
Gage, David P.....(M) Saginaw
Galsterer, Edwin C.....Saginaw
Gerber, Herbert.....(M) Saginaw
Goman, Louis D.....Saginaw
Grigg, Arthur.....(E) Saginaw
Grigg, Arthur P.....(M) Saginaw
Hand, Eugene.....(M) Saginaw
Harvie, L. C.....Saginaw
Helmkamp, Herbert O.....Saginaw
Hester, E. G.....(M) Saginaw
Hohn, Fred, Jr.....Saginaw
Howell, Don M.....Saginaw
Imerman, Harold M.....(M) Saginaw
Jaenichen, R.....Saginaw
James, J. W.....(M) Saginaw
Jiroch, R. S.....Saginaw
Jordan, Leo A.....Saginaw
Kemp, J. N.....Saginaw
Kempton, R. M.....Saginaw
Kerr, William.....(M) Saginaw
Kirchgeorg, Clemens G.....Frankenmuth
Kleekamp, H. G.....Saginaw
Klippen, Arthur J.....(M) Saginaw
Kowals, F. V.....Saginaw
LaPorte, L. A.....Saginaw
Ling, Ernest M.....Hemlock
Lohr, O. W.....Saginaw
Longstreet, Martha L.....Saginaw
Luger, F. E.....(M) Saginaw
Lurie, Robert.....(M) Saginaw
Lyle, R. C.....Bridgeport
MacKinnon, Edwin D.....Saginaw
MacMeekin, James W.....(M) Saginaw
Manning, John E.....(M) Saginaw
Markey, Joseph P.....Saginaw
Martzowka, Wm. P.....Saginaw
Matthews, Harry C.....(M) Saginaw
Maurer, John A.....(M) Saginaw
Mayne, Harold.....Saginaw
McKinney, Alex R.....Saginaw
McLandress, Joshua A.....Saginaw
Meyer, Henry J.....Saginaw
Mikan, V. Robert.....Saginaw
Moon, A. R.....Saginaw
Morgrette, Leonard.....(M) Saginaw
Mudd, Richard D.....(M) Texas
Murphy, Albert P.....Saginaw
Murray, Charles R.....(M) Saginaw
Nicholas, Mildred.....Saginaw
Northway, Robert O.....Saginaw
Novy, F. O.....Saginaw
Ostrander, Frank W.....Freeland
Phillips, Homer A.....(M) Saginaw
Pietz, Frederick.....Saginaw
Pillsbury, Edward A.....Frankenmuth
Potvin, Clifford D.....(M) Saginaw
Poole, Frank A.....Saginaw
Richards, Ned W.....(M) Saginaw
Richter, Harry J.....(M) Saginaw
Ryan, M. D.....(E) Saginaw
Ryan, R. S.....(M) Norfolk, Va.
Sample, J. T.....Saginaw
Sargent, D. V.....(M) Saginaw
Schneider, Alexander.....(M) Detroit
Sheldon, S.....(M) Saginaw
Skowronski, Casimer A.....(M) Saginaw
Slack, Walter K.....(M) Saginaw
Stahly, Edward.....Saginaw
Stander, A. C.....(M) Saginaw
Stewart, George W.....(M) Saginaw
Thomas, Dale.....Saginaw
Thompson, A. B.....(M) Saginaw
Tiedke, G. E.....(M) Saginaw
Toshach, C. E.....Saginaw
Wallace, H. C.....(M) Saginaw
Westlund, Norman.....Saginaw
Yntema, S.....(M) Saginaw

Sanilac County

Blanchard, E. W.....Deckerville
Ellis, N. J.....Croswell
Gift, W. A.....Marlette
Hart, R. K.....Croswell
Koch, Donald A.....(M) Ann Arbor
Learmont, H. H.....Croswell
McGunegle, K. T.....Sandusky
Norgaard, Hal V.....Los Angeles, Calif.
Seager, M. Cole.....Brown City
Sebille, Louis J.....(M) Maywood, Ill.
Tweedie, G. Evans.....Sandusky
Tweedie, S. Martin.....Sandusky
Webster, John C.....Marlette

St. Clair County

Armsbury, A. B.....Marine City
Attridge, J. A.....(L) Port Huron
Banting, K. C.....(M) Governors Island, N. Y
Battley, J. C. S.....Port Huron
Beck, Frank K.....Port Huron
Benjamin, Clayton C.....Port Huron
Biggar, R. J.....(M) Port Huron
Borden, C. L.....Port Huron
Boughner, W. H.....Algonac
Bovee, M. E.....Port Huron
Brush, Howard O.....Port Huron
Burke, Ralph M.....Port Huron
Burley Jacob H.....Port Huron
Callery, A. L.....(L) Port Huron
Campbell, R. H.....New York City
Carey, Lewis M.....Detroit
Carney, F. V.....St. Clair
Clyne, B. C.....(M) Yale
Cooper, Thomas H.....Port Huron
DeGurse, T. E.....Marine City
Derck, W. P.....(E) Port Huron
Feldman, Gordon G.....Yale
Fitzgerald, E. W.....(M) Port Huron
Hall, W. E. B.....Port Huron
Holcomb, R. J.....Marine City
Hoyt, Charles M.....(M) Port Huron
Kesl, George Matthew.....Port Huron
Kirker, F. O.....St. Clair
Le Galley, K. B.....(M) Port Huron
Licker, R. R.....(M) Marysville
Ludwig, F. E.....(M) Port Huron
Martin, C. S.....Port Huron
McColl, D. J.....(E) Port Huron
McColl, Neil J.....Port Huron
MacPherson, C. A.....St. Clair
Meredith, E. W.....Port Huron
Novak, Walter S.....Port Huron
Patterson, D. Webster.....Port Huron
Pollock, Donald A.....Yale
Reynolds, Annie E.....Port Huron
Ryerson, W. W.....Port Huron
Schaefer, W. A.....Port Huron
Sites, E. C.....Port Huron
Thomas, C. F.....Port Huron
Treadgold, Douglas.....Port Huron
Ware, John R.....Port Huron
Wass, Henry C.....St. Clair
Waters, George.....Port Huron
Wellman, Joseph E.....Port Huron
Wight, William G.....Yale
Witter, Gordon L.....(M) Red Bank, Cal.

St. Joseph County

Berg, Lawrence A.....(M) Sturgis
Blood, J. V.....Three Rivers
Brunson, A. E.....Colon
Braham, Wilbur.....(M) Sturgis
Dean, Ray E.....Three Rivers
Fiegel, S. A.....(M) Sturgis
Fortner, R. J.....Three Rivers
Gillespie, E.....Sturgis
Hoekman, Aben.....(M) Constantine
Holm, Arvid G.....(M) Three Rivers
Kane, David M.....Sturgis
Miller, C. G.....Sturgis
Parrish, Marion.....Sturgis
Pennington, H. C.....(M) White Pigeon
Penzotti, Stanley.....(M) Three Rivers
Porter, C. G.....Three Rivers
Raisch, Fred J.....(M) White Pigeon
Reed, Fred R.....Three Rivers
Shaw, G. D.....(M) Mendon
Sheldon, J. P.....(M) Sturgis
Slote, L. K.....Constantine
Springer, R. A.....Centerville
Sweetland, G. J.....Constantine
Tesar, F. J.....(M) Centerville
Weir, Dale C.....Three Rivers
Zimont, R. D.....(M) Constantine

Shiawassee County

Arnold, Alfred L., Jr.....Owosso
Arnold, Alfred L., Sr.....(E) Owosso
Backe, John C.....(M) Unknown
Bennett, George W.....Elsie
Blue, J. J.....Owosso
Brandel, J. M.....(M) Illinois
Brown, Richard J.....(M) Owosso
Buzzard, Walter D.....(M) Chesaning
Chipman, E. M.....(M) Owosso

Fillinger, W. B.....Ovid
Harkness, C. A.....Owosso
Hoshal, Vern L.....Durand
Hume, Arthur M.....(E) Owosso
Hume, Harold A.....Owosso
Janci, Julius.....(M) Owosso
Lanting, Helen E.....Owosso
Lanting, Roelof.....(M) Owosso
Linden, V. E.....(M) Durand
McKnight, E. R.....(M) Owosso
Merz, W. L.....Chesaning
Parker, W. T.....Owosso
Pochert, R. C.....Owosso
Richards, C. J.....Durand
Sahlmark, J. F.....Owosso
Shepherd, W. F.....(M) Owosso
Slagh, E. M.....(M) Elsie
Watts, Fred A.....Owosso
Weinkauf, W. F.....Corunna
Weston, C. L.....Owosso
Wilcox, Anna L.....Owosso
Wilcox, C. M.....(M) Owosso

Tuscola County

Barbour, Harry A.....Mayville
Bates, George.....(E) Kingston
Berman, Harry.....Millington
Cook, Raymond.....Akron
Dickerson, Willard W.....Caro
Dixon, Robert L.....Wahjamega
Donahue, Theron.....Cass City
Flett, Richard O.....Millington
Gugino, Frank James.....(M) Reese
Hoffman, T. E.....(M) Vassar
Howlett, R. R.....(M) Caro
Johnson, O. G.....Mayville
Kaven, G. H.....Unionville
Merrill, Elmer H.....Caro
Morris, Frank L.....Cass City
Nigg, Herbert L.....Caro
Ruskin, D. B.....Caro
Savage, Lloyd L.....Caro
Shoemaker, J.....Vassar
Starmann, Bernard.....Cass City
Swanson, E. C.....Vassar
Von Renner, Otto.....(M) Vassar

Van Buren County

Boothby, Carl.....(M) Hartford
Boothby, F. M.....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P.....Decatur
Buckborough, M. W.....So. Haven
Diephuis, Bert.....(M) South Haven
French, M. R.....Paw Paw
Gano, Avison.....(M) Bangor
Giddings, Ralph R.....(M) California
Giffen, John R.....Bangor
Greenman, Newton H.....Decatur
Hall, E. J.....(M) Hartford
Hasty, Willis A.....(M) Grand Rapids
Hoyt, Wilbur F.....(E) Paw Paw
Iseman, Joseph W.....(M) Paw Paw
Itzen, J. F.....South Haven
Maxwell, J. Charles.....Paw Paw
McFadden, R. I.....(M) Bloomingdale
Penoyar, C. L.....South Haven
Spalding, R. W.....Gobles
Steele, Arthur H.....Paw Paw
TenHouten, Charles.....(M) Paw Paw
Terwilliger, Edwin.....(M) Lansing
Urist, Martin J.....South Haven
Young, William R.....Lawton

Washtenaw County

Adcock, John D.....Ann Arbor
Aldrich, Napier S.....(M) Ann Arbor
Alexander, John.....Ann Arbor
Andros, George J.....(M) California
Armstrong, Richard C.....(M) Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John.....Washington, D. C.
Barss, Harold D.....Ypsilanti
Bass, Thomas J.....Ypsilanti
Bassow, Paul H.....Ann Arbor
Bauer, Gerhard H.....(M) Ann Arbor
Baugh, R. H.....Ypsilanti
Beebe, Hugh M.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belser, Walter.....Ann Arbor
Bethell, Frank H.....Ann Arbor
Boyer, Philip A.....Ann Arbor
Block, Malcolm L.....Ann Arbor
Brace, William M.....Ann Arbor
Britton, H. B.....Ypsilanti
Bruce, James D.....Ann Arbor
Buscaglia, C. J.....(M) Ypsilanti
Buxton, Robert W.....Ann Arbor
Camp, Carl Dudley.....Ann Arbor
Clements, Glenn T.....(M) Ann Arbor
Coller, Frederick A.....Ann Arbor
Conger, Kyril B.....(M) Honolulu
Conn, Jerome W.....Ann Arbor
Courville, Charles J.....Ann Arbor
Coxon, Alfred W.....Ann Arbor
Cummings, H. H.....Ann Arbor
Cummings, Robert H.....(M) Ann Arbor
Curtis, Arthur C.....Ann Arbor
Day, A. Jackson.....(M) Detroit
deAlvarez-Skinner, Russell(M) Ann Arbor
De Jong, Russell N.....Ann Arbor
DeTar, John S.....Milan
Dingman, Reed O.....Ann Arbor
Donaldson, S. W.....Ann Arbor
Dowman, Charles E.....(M) Ann Arbor
Duff, Ivan F.....(M) Ann Arbor
Engelke, Otto K.....Ann Arbor
Everett, Meldon.....(M) Ann Arbor
Falls, Harold F.....Ann Arbor
Fitzgerald, Thomas D.....(M) Ann Arbor
Forsythe, Warren E.....Ann Arbor
Foster, D. Bernard.....(M) Battle Creek
Fralick, F. Bruce.....Ann Arbor
Francis, Thomas, Jr.....Ann Arbor
Frye, Carl H.....Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin C.....Ann Arbor
Gates, John L.....Ann Arbor
Gulde, Andros.....Chelsea
Haas, Reynold L.....Ann Arbor
Hagerman, George W.....(M) Ann Arbor
Haight, Cameron.....Ann Arbor
Hammond, W. W., Jr.....Plymouth
Handorf, Heinrich H.....Northville
Hannum, M. R.....Milan
Harris, Bradley M.....(M) Ypsilanti
Henderson, John W.....Ann Arbor
Henry, L. Dell.....Ann Arbor
High, Howard C.....(M) Ann Arbor
Himler, Leonard E.....Ann Arbor
Hodges, Fred J.....Ann Arbor
Holt, John F.....Ann Arbor
Howard, S. C.....Ann Arbor
Hunt, Homer H.....(M) Unknown
Hunt, Robert E.....Ann Arbor
Jenkins, Daniel E.....Ann Arbor
Jimenez, Buenaventura.....Ann Arbor
Johnson, Lester J.....(M) Ann Arbor
Johnson, Sture A. M.....Ann Arbor
Johnston, Franklin D.....Ann Arbor
Jordan, Paul H.....(M) Unknown
Kahn, Edgar A.....(M) Ann Arbor
Kamby, Arnold H.....(M) Maryland
Keller, Arthur P.....(M) Ann Arbor
Kemper, J. W.....Ann Arbor
Kiehn, Clifford L.....(M) Unknown
Kimbrough, Robert C., Jr.....(M) Ann Arbor
Kleinschmidt, Earl E.....(M) Urbana, Ill.
Kleinschmidt, Gladys.....Mt. Pleasant
Klingman, Theophil.....Ann Arbor
Knoll, Leo A.....Ann Arbor
La Fever, Sidney L.....Ann Arbor
Lampe, Isadore.....Ann Arbor
Law, John L.....Ann Arbor
Levin, Manuel.....(M) Ann Arbor
Lichty, Dorman E.....Ann Arbor
List, Carl F.....Ann Arbor
Lowell, Vivion F.....(M) Ypsilanti
Lynn, Harold P.....Ypsilanti
Lyons, Richard H.....Ann Arbor
MacIntyre, Robert S.....Ann Arbor
MacKaye, Lavinia G.....Ann Arbor
Malcolm, Karl D.....Ann Arbor
Mallery, Otto T.....Ann Arbor
Marshall, Mark.....Ann Arbor
Martin, Donald W.....Ypsilanti
Maxwell, James H.....Ann Arbor
McCotter, Rollo E.....Ann Arbor
McEachern, Thomas H.....Ann Arbor
Milford, Albert F.....Ypsilanti
Miller, Harold.....(M) Saline
Miller, Norman F.....Ann Arbor
Moore, Donald F.....(M) Ypsilanti
Muehlig, George F.....Ann Arbor
Myers, Dean W.....Ann Arbor
Nesbit, Reed M.....Ann Arbor
Newton, Charles W.....Ann Arbor
Oliphant, L. W.....Ann Arbor
Palmer, Alger A.....(M) Chelsea
Parsons, Robert J.....(M) Oregon
Patterson, Ralph M.....Ann Arbor
Peet, Max M.....Ann Arbor
Plumb, Robert T.....Ann Arbor
Pollard, H. M.....Ann Arbor
Potter, Marcia.....Ypsilanti
Price, Helen F.....Ann Arbor
Prout, Gordon J.....Saline
Rague, Paul O.....(M) Manchester
Ransom, Henry K.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Ratliff, Rigdon K.....Ann Arbor
Reynolds, Stephen.....(M) Ann Arbor
Riecker, H. H.....Ann Arbor
Riggs, Harold W.....Ann Arbor
Robb, David N.....Ypsilanti
Rosenbaum, Francis F.....Ann Arbor
Ross, C. Howard.....Ann Arbor
Salon, Dayton D.....(M) Ann Arbor
Sayre, George S.....Ypsilanti
Schumacker, W. E.....Ann Arbor
Seevers, Maurice H.....Ann Arbor
Seime, Reuben I.....Ypsilanti
Sheldon, John M.....Ann Arbor
Sibbald, Malcolm L.....Chelsea
Sink, Emory W.....Ann Arbor
Smalley, Marianna.....Ann Arbor
Smith, Eleanor.....Ann Arbor
Smith, Joseph G.....(M) California
Snow, Glenadine.....Ypsilanti
Solis, Jeanne C.....(E) Ann Arbor
Steffe, Ralph S.....Ann Arbor
Stoddard, F. Jackson.....(M) Ann Arbor
Struthers, James N. P.....Ann Arbor
Sturgis, Cyrus C.....Ann Arbor
Sundwall, John.....Ann Arbor
Teed, Reed W.....(M) Ann Arbor
Thieme, E. Thurston.....(M) Ann Arbor
Towsley, Harry A.....(M) Ann Arbor
Valk, William L.....(M) Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Alexander M.....(M) Ann Arbor
Washburne, Charles L.....Ann Arbor
Watson, Ernest H.....Ann Arbor
Wessinger, J. A.....(E) Ann Arbor
Wile, Udo J.....(M) Ann Arbor
Wilkinson, Charles F.....Ann Arbor
Williams, Howard R.....Ann Arbor
Williamson, F. B.....Ypsilanti
Wilson, Frank N.....Ann Arbor
Wilson, James Leroy.....Ann Arbor
Wisdom, Inez R.....Ann Arbor
Woods, J. J.....Ypsilanti
Worth, Melissa H.....Ypsilanti
Wright, Walter J.....Ypsilanti
Wylie, Wm. C.....Dexter
Yoder, O. R.....Ypsilanti

Wayne County

Aaron, Charles D.....(E) Detroit
Abbott, William E.....Detroit
Abrams, Harry M.....Detroit
Abramson, Max.....Detroit
Abruzzo, Anthony M.....(M) Detroit
Adams, James R.....Dearborn
Adelson, Sidney L.....(M) Detroit
Adler, Sidney.....(M) Detroit
Agnelly, Edward J.....Detroit
Agnew, George H.....Detroit
Alderman, R. F.....Detroit
Aldrich, E. Gordon.....Detroit
Allen, John V.....Lincoln Park
Alles, Russell W.....Detroit
Allison, Frank B.....Detroit
Allison, Herbert C.....Grosse Pointe Farms
Alpiner, Sam.....Van Dyke
Altman, Raphael.....Detroit

Altshuler, Abraham M. Detroit
Altshuler, Ira M. Detroit
Altshuler, Samuel S. (M) Detroit
Amberg, Emil (E) Detroit
Amolsch, Arthur L. Detroit
Amos, Thomas G. Detroit
Anderson, Bruce Detroit
Anderson, Gordon H. (M) Dearborn
Anderson, J. O. Detroit
Anderson, Walter L. (M) Detroit
Anderson, Walter T. Detroit
Andries, George H. Detroit
Andries, Joseph H. Detroit
Andries, Raymond G. Detroit
Andries, Raymond M. (M) Detroit
Angel, John J. Wayne
Ankley, J. W. Detroit
Anslow, Robert E. Detroit
Appel, Philip R. Detroit
Appelman, H. B. Detroit
Arehart, Burke W. (M) Detroit
Arent, John G. Detroit
Armstrong, Arthur G. Detroit
Arnold, William J. Detroit
Arnold, Effie Detroit
Aronstam, Noah E. Detroit
Arrington, Robyn J. Detroit
Ascher, Meyer S. (M) Detroit
Ashe, Stilson R. Detroit
Ashley, L. Byron (M) Detroit
Ashton, F. B. Highland Park
Asselin, J. L. Detroit
Asselin, Regis F. (M) Detroit
Athay, Roland M. Detroit
Atchison, Russell M. Northville
Atler, Lawrence R. Detroit
Atler, Leroy L. (M) Detroit
Aubel, M. E. Detroit
August, Harry E. (M) Detroit
Auld, Douglas V. Detroit
Axelson, A. U. Detroit

Babcock, Kenneth B. (M) Detroit
Babcock, L. K. Detroit
Babcock, Myra E. Detroit
Babcock, W. W. Detroit
Bach, Walter F. Detroit
Bachman, Morris E. Detroit
Bacon, Vinton A. Detroit
Badar, Benjamin H. (M) Detroit
Baer, George J. Detroit
Baer, Raymond B. Detroit
Baeff, Michael A. Detroit
Bagley, Harry E. (M) Dearborn
Bailey, Carl C. (M) Detroit
Bailey, Don A. Detroit
Bailey, Louis J. Detroit
Baker, Clarence Detroit
Bakst, Joseph Detroit
Balaga, F. T. Detroit
Balcerski, Matthew A. Detroit
Ballard, Charles S. Detroit
Balser, Charles W. Detroit
Baltz, James I. Detroit
Barak, Lewis R. (M) Detroit
Baranowski, A. W. Detroit
Barenholtz, Benjamin (M) Detroit
Barland, Oscar L. Detroit
Barnes, Donald J. Detroit
Barnes, Van D. Detroit
Barnett, Edwin D. Detroit
Barnett, Saul E. Detroit
Barnett, Morton, Jr. Detroit
Barone, Charles J. Highland Park
Barrett, Wyman D. Detroit
Barron, William H. Detroit
Bartemeiser, Leo H. Detroit
Barton, J. R. Detroit
Bates, Gaylord S. (M) Claremont, Calif.
Bauer, Benedict J. Detroit
Bauer, A. Robert Detroit
Bauer, Lester Eugene (M) Detroit
Baumer, Moe (M) Detroit
Baumgarten, Elden C. Detroit
Bayles, John G. Detroit
Beach, Watson Detroit
Beam, A. Duane (M) Grosse Pointe
Beaton, Colin (M) Detroit
Beattie, Robert Detroit
Beaver, Donald C. Detroit
Beck, Eva F. Eloise
Becker, Abraham (M) Detroit
Becker, Joseph W. Detroit
Becklein, C. L. Detroit
Beckwitt, M. C. (M) Detroit
Bedell, A. Detroit
Beer, Joseph F. (M) Detroit
Beeuwkes, L. E. (M) Dearborn
Begle, Howell L. Detroit
Behn, Claud W. Detroit
Beigler, Sydney K. Detroit
Beitman, Max R. (M) Detroit
Belanger, Ernest E. (M) River Rouge
Belanger, Henry Detroit
Belanger, Wm. G. (M) Detroit
Belknap, Warren F. (M) Detroit
Bell, J. Kenner Detroit
Bell, William Detroit
Bennett, Germany E. Detroit
Bennett, Harry B. Detroit
Bennett, Sanford A. (M) Detroit
Bennett, Wm. E. Detroit
Bennett, Zina B. Detroit
Benson, C. D. (M) Detroit
Benson, Davis A. (M) Detroit
Benson, Virginia Detroit
Bentley, Frederick E. Plymouth
Bentley, Neil I. Detroit
Berent, Morris S. Detroit
Beresh, Louis (M) Detroit
Berge, Clarence A. Detroit
Bergman, Murray Stewart Detroit
Bergman, Theodore I. (M) Detroit
Bergo, Howard L. (M) Detroit
Berke, Sydney S. Detroit
Berkey, Wm. E. Detroit
Berlien, Ivan C. (M) Detroit
Berman, Lawrence Detroit
Berman, Robert Detroit
Berman, Sidney (M) Detroit
Bernard, Walter G. Detroit
Bernbaum, Bernard Detroit
Bernstein, Albert E. Detroit
Bernstein, Samuel S. (M) Detroit
Berry, Joseph E. Detroit
Besancon, J. H. Detroit
Best, T. H. Edward Detroit
Bicknell, Edgar A. (M) Detroit
Bicknell, Frank B. (M) Detroit
Birch, John R. (M) Detroit
Birkelo, Carl C. Detroit
Birndorf, Leonard (M) Detroit
Bittker, I. Irving Detroit
Bittrich, Norbert M. Detroit
Black, Perry S. Detroit
Blaine, Max (M) Detroit
Blain, Alexander III Detroit
Blain, Alexander W. Detroit
Blain, James H., Jr. (M) Detroit
Blair, K. E. Detroit
Blanchet, Alred D. Detroit
Blashill, James B. (M) Detroit
Bleier, Alfred Detroit
Bleier, Joseph Detroit
Bloch, Abraham Detroit
Blodgett, Wm. E. Detroit
Blodgett, Wm. H. (M) Detroit
Bloom, Arthur R. Detroit
Bloomer, Earl Dearborn
Blumenthal, Franz L. Detroit
Boccaccio, John (M) Detroit
Boccia, James J. (M) Detroit
Boddie, Lewis F. Detroit
Boddie, Arthur W. Detroit
Boehm, John D. Detroit
Boell, Arthur F. Detroit
Bogue, Robert E. Detroit
Bogusz, Ladislaus Eloise
Bohn, Stephen (M) Detroit
Boileau, Thornton I. (M) Detroit
Boles, A. E. (M) Miami, Fla.
Bookmyer, R. H. Detroit
Bookstein, Abraham M. (M) Detroit
Botvinick, Isadore (M) Detroit
Boutrous, Thomas A. Detroit
Bovill, E. G. (M) Detroit
Bower, Franklin T. Detroit
Bowers, Leo J. Detroit
Boyd, John H. Trenton
Brachman, D. S. Detroit
Bracken, Andrew H. Dearborn
Bradley, George Detroit
Bradshaw, Wm. H. Detroit
Brady, Herbert A. River Rouge
Braitman, Louis Detroit
Braley, Wm. N. Detroit
Bramigk, Fritz W. Detroit
Brand, Benjamin Detroit
Brando, Russell G. Detroit
Brandt, Edward L. Detroit
Braun, Lionel (M) Detroit
Braverman, Morris Detroit
Brekke, Viola G. Detroit
Breitenbecher, Edw. R. Detroit
Brengle, Deane R. Detroit
Breon, Guy L. Detroit
Briegel, Walter A. Detroit
Brines, O. A. (M) Detroit
Bringard, Elmer L. (M) Detroit
Brisbois, Harold J. Plymouth
Brisson, Joseph (M) Detroit
Bromme, William (M) Detroit
Bronson, Wm. W. (M) Detroit
Brooks, A. L. Detroit
Brooks, Clark D. Detroit
Brooks, Charles W. (M) Detroit
Brooks, Nathan (M) Detroit
Brosius, Wm. L. Detroit
Broudo, Philip H. Detroit
Brough, Glen A. (M) Detroit
Brouwer, Stephen W. Detroit
Brown, A. O. Detroit
Brown, Andrew G. (M) Detroit
Brown, Carlton F. (M) Detroit
Brown, Charles H. (M) Detroit
Brown, Francis Detroit
Brown, Gordon T. Detroit
Brown, Harvey F. Detroit
Brown, Henry S. Detroit
Brown, John R. (M) Detroit
Brown, Samuel M. Detroit
Brown, Stanley H. Detroit
Brown, Thomas A. Detroit
Brownell, Paul G. (M) Highland Park
Bruehl, Richard A. Detroit
Brunk, Andrew S. Detroit
Brunk, C. F. Detroit
Brunke, Bruno B. Detroit
Brush, Brock E. Detroit
Bryce, John D. (M) Detroit
Buchanan, W. Paul Detroit
Buchner, Harold W. (M) Detroit
Buck, John D. Detroit
Budson, Daniel Detroit
Buesser, Frederick G. Detroit
Buller, H. L. Detroit
Burbidge, Earl L. Detroit
Burby, John J. Detroit
Burgess, Charles M. Detroit
Burns, Robert T. Detroit
Burnstine, Julius Y. Detroit
Burnstine, Perry P. (M) Detroit
Burr, George C. Detroit
Burr, H. Leonard Grosse Pointe
Burrows, Howard A. Dearborn
Burstein, Harry S. Detroit
Burstein, I. Marvin Detroit
Burstein, Morris M. Detroit
Burton, D. T. Detroit
Bush, Glendon J. (M) Detroit
Bush, Lowell M. Detroit
Butler, Harry J. Detroit
Butler, L. H. Detroit
Butler, Volney N. Detroit
Butterworth, Herman K. Lincoln Park
Buttrum, Edward J. Detroit
Byers, Dudley W. Detroit
Byington, Garner M. Detroit

Cadieux, Henry W. Detroit
Caldwell, J. Ewart (M) Detroit
Caldwell, George L. Detroit
Calkins, H. N. (M) Detroit
Callaghan, T. T. (M) Detroit
Cameron, A. H. Wyandotte
Campau, George H. Detroit
Campbell, Charles A. (M) Dearborn
Campbell, Duncan Detroit
Campbell, Duncan A. Detroit
Campbell, Malcolm D. Pleasant Ridge
Campbell, Mary B. Detroit
Candler, Clarence L. Detroit
Canter, Allie L. Detroit
Canter, Gayle E. Detroit
Cantor, M. O. Detroit
Capano, Oreste A. (M) Detroit
Caplan, Leslie (M) Detroit
Caputo, Joseph M. (M) Dearborn
Caraway, James E. (M) Wayne
Carbone, Louis A. Detroit
Carey, Cornelius Detroit
Carleton, Lawrence H. Detroit
Carlucci, Peter F. Detroit
Carmichael, E. K. Detroit
Carnes, Harry E. (M) Detroit
Carney, John W. (M) Detroit
Carp, Joseph (M) Detroit
Carpenter, C. H. Detroit
Carpenter, C. J. Detroit
Carpenter, Glenn B. Detroit
Carpenter, William S. (M) Detroit
Carr, J. G. Detroit
Carroll, E. H. Detroit
Carroll, Lona B. Detroit
Carlson, Harold W. Detroit
Carson, Herman J. Detroit
Carstens, Henry R. (M) Philadelphia
Carter, John M. Detroit
Carter, L. F. Detroit
Cassidy, Wm. J. Detroit
Castrop, C. W. Dearborn
Cathcart, Edward (M) Detroit
Catherwood, Albert E. Detroit
Caton, Dorothy Detroit
Caughey, Edgar H. (M) Detroit
Cavell, Roscoe W. (M) Detroit
Cetlinski, Constantine A. Hamtramck
Chabut, V. George Northville
Chall, Henry G. Detroit
Chalat, Jacob H. Detroit
Chance, J. H. Detroit
Chapman, Aaron L. Detroit

Chapman, Paul T. ..... Detroit
Chapnick, H. A. ..... (M) Detroit
Chase, Clyde H. ..... Detroit
Chatel, Arthur N. ..... Detroit
Chester, W. P. ..... Detroit
Chesluk, H. M. ..... (M) Detroit
Childs, Geo. Millard ..... (M) Detroit
Chipman, W. A. ..... Detroit
Chittenden, George E. ..... Detroit
Chittick, Wm. R. ..... (E) Detroit
Chostner, G. C. ..... Detroit
Christensen, C. A. ..... Dearborn
Christopher, James G. ..... Detroit
Crouch, Laurence A. ..... Detroit
Church, Aloysius ..... Detroit
Cioffari, Mario S. ..... Detroit
Ciprian, Joseph E. ..... Detroit
Clark, Benjamin W. ..... (M) Detroit
Clark, C. M. ..... Detroit
Clark, Donald V. ..... Detroit
Clark, George E. ..... (E) Detroit
Clark, Harold E. ..... Detroit
Clark, Harry G. ..... Detroit
Clark, Harry L. ..... Detroit
Clark, Ronald E. ..... Detroit
Clarke, Norman E. ..... Detroit
Cleage, Louis J. ..... Detroit
Clifford, Charles H. ..... Detroit
Clifford, John E. ..... Detroit
Clifford, Thomas P. ..... Detroit
Clippert, J. C. ..... Grosse Ile
Coan, Glenn L. ..... Wyandotte
Coates, Carl A. ..... Dearborn
Cobane, John H. ..... Detroit
Cochrane, Edgar G. ..... Detroit
Cohen, Hyman H. ..... (M) Detroit
Cohn, Daniel E. ..... (M) Detroit
Cohoe, Don A. ..... Detroit
Cole, Fred H. ..... Detroit
Cole, James E. ..... Detroit
Cole, Wyman C. C. ..... (M) Detroit
Coleman, Margarete W. ..... Detroit
Coleman, William G. ..... Redford
Coll, Howard R. ..... Detroit
Collings, M. Raymond ..... Detroit
Collins, James D. ..... Detroit
Colvert, James R. ..... Detroit
Colvin, Leslie T. ..... Detroit
Colyer, Raymond G. ..... Detroit
Comstock, Lawrence ..... Trenton
Condon, Stanley ..... Detroit
Conley, L. C. M. ..... Detroit
Conn, Raymond W. ..... (M) Detroit
Connelly, Richard C. ..... Detroit
Connolly, Frank ..... Detroit
Connolly, John P. ..... Detroit
Connolly, Paul J. ..... Detroit
Connors, J. J. ..... Detroit
Conrad, E. R. ..... Detroit
Constable, Canute G. ..... Detroit
Cooksey, Warren B. ..... Detroit
Cook, James C. ..... (M) Dearborn
Coolidge, Maria Belle .. Grosse Pointe Park
Cooper, B. J. ..... Detroit
Cooper, E. L. ..... Detroit
Cooper, James B. ..... Detroit
Cooper, Ralph R. ..... (M) Detroit
Corbeille, Catherine ..... Detroit
Coseglia, Robert P. ..... Detroit
Cosgrove, Wm. J. ..... (M) Detroit
Costello, Russell T. ..... Detroit
Cotruro, L. D. ..... Detroit
Cotton, S. O. ..... Detroit
Coucke, Henry O. ..... (M) Detroit
Coulter, Wm. J. ..... (M) Detroit
Cowan, Wilfrid ..... Detroit
Cowen, Leon B. ..... Detroit
Cowen, Robert L. ..... Detroit
Coyne, Douglas R. ..... Detroit
Crane, Langdon T. ..... Detroit
Crawford, Albert S. ..... Detroit
Cree, Walter J. ..... (E) Detroit
Crews, Thomas H. ..... Detroit
Croll, L. J. ..... (M) Detroit
Cross, Harold E. ..... Detroit
Crossen, Henry F. ..... Detroit
Croushore, J. E. ..... (M) Detroit
Cruikshank, Alexander ..... Detroit
Culp, Ormond ..... (M) Detroit
Curhan, Joseph H. ..... Detroit
Curry, F. S. ..... Detroit
Curtis, Frank E. ..... Detroit
Cushing, Russell G. ..... Detroit
Cushman, H. P. ..... Detroit
Cusick, Paul L. ..... (M) Detroit

Dale, Esther H. ..... Detroit
Dale, Mark ..... (M) Detroit
Dana, Harold M. ..... (M) Detroit
Danforth, J. C. ..... Detroit
Danforth, Mortimer E. ..... Detroit
Daniels, L. E. ..... Detroit
Darling, Milton A. ..... Detroit
Darpin, Peter H. ..... Detroit
Dart, Edward E. ..... Detroit
Davidow, David M. ..... Detroit
Davidson, Harry O. ..... (M) Detroit
Davies, Thomas S. ..... Grosse Pointe
Davies, Windsor S. ..... (M) Detroit
Davis, Egbert F. ..... Wyandotte
Davis, George H. ..... (M) Detroit
Davis, Lindon L. ..... (M) Detroit
Davis, William H. ..... (M) Detroit
Dawson, F. E. ..... Detroit
Dawson, Ralph ..... Detroit
Dawson, W. A. ..... Inkster
Day, J. Claude ..... (M) Detroit
Deering, Robert J. ..... (M) Detroit
Defever, Cyril R. ..... (M) Detroit
Defnet, William A. ..... Detroit
DeJongh, Edwin ..... Detroit
Delbert, Stewart G. ..... (M) Croswell
Demaray, John F. ..... Detroit
Dempster, James H. ..... Detroit
DeNike, A. James ..... Detroit
Denis, George M. ..... Detroit
DePonio, Sylvester A. ..... Detroit
Derby, Arthur P. ..... Detroit
Deresz, Alphonse ..... (M) Detroit
Derleth, Paul E. ..... (M) Detroit
DeSpelder, Ray E. ..... Detroit
DeTomasi, Rome Q. ..... Detroit
Dibble, Harry F. ..... Detroit
Dickman, Harry M. ..... (M) Detroit
Dickson, B. R. ..... Detroit
Dickson, Elias L. ..... Detroit
Diebel, Nelson W. ..... Detroit
Dietzel, H. O. ..... Detroit
Dill, Hugh L. ..... Detroit
DiLoreto, P. C. ..... (M) Detroit
Dittmer, Edwin ..... Detroit
Dixon, Fred W. ..... (M) Dearborn
Dixon, Ray S. ..... Detroit
Dodds, John C. ..... Detroit
Dodenhoff, C. F. ..... Detroit
Dodrill, F. D. ..... Detroit
Doerr, Louis E. ..... (M) Detroit
Dolega, Stanley F. ..... (M) Detroit
Dolman, E. Nesbitt ..... Detroit
Domzalski, C. A. ..... Detroit
Donald, Douglas ..... (M) Detroit
Donovan, Daniel R., Jr. ..... Detroit
Dorsey, John M. ..... Detroit
Doty, Chester A. ..... Detroit
Doub, Howard P. ..... Detroit
Douglas, Bruce H. ..... Detroit
Douglas, Clair L. ..... (M) Detroit
Dovitz, Benjamin W. ..... Detroit
Dow, Roy E. ..... Detroit
Dowdle, Edward ..... Detroit
Dowling, Harvey E. ..... (M) Detroit
Downer, Ira G. ..... Detroit
Doyle, George H. ..... Detroit
Drake, Ellet H. ..... (M) Detroit
Drake, James J. ..... Detroit
Draves, Edward F. ..... Detroit
Drews, Robert S. ..... Detroit
Drinkhaus, H. I. ..... Detroit
Droock, Victor ..... Detroit
Drummond, Donald L. ..... Detroit
Dubin, Joseph J. ..... Detroit
Dubnove, Aaron ..... Detroit
DuBois, Paul W. ..... Detroit
Dubpernell, Karl ..... Detroit
Dubpernell, Martin S. ..... Detroit
Dundas, Edw. M. ..... Detroit
Dunlap, Henry A. ..... Detroit
Dunlap, Samson F. ..... Detroit
Dunn, Cornelius E. ..... Detroit
Dutchess, Charles E. ..... New York City
Dwaihy, Paul ..... Detroit
Dwyer, Francis ..... (M) Detroit
Dziuba, John F. ..... Detroit

Eades, Charles C. ..... (M) Detroit
Eadie, Gordon A. ..... Detroit
Eakins, Frederick J. ..... Dearborn
Eaton, Crosby D. ..... Detroit
Edgar, Russell G. ..... Detroit
Eder, Joseph R. ..... (M) Detroit
Eder, Samuel J. ..... Detroit
Edgar, Irving I. ..... Detroit
Edmonds, W. N. ..... Detroit
Edwards, Gilbert L. ..... Detroit
Edwards, J. W. ..... Detroit
Eisman, Clarence H. ..... Detroit
Eldredge, Edward F. ..... (M) Detroit
Elman, Meyer J. ..... (M) Detroit
Elliott, Wm. G. ..... Detroit
Elvidge, Robert J. ..... Detroit
Engel, Earl H. ..... (M) Wyandotte
Eno, Laurel S. ..... (M) Detroit
Ensign, Dwight C. ..... Detroit
Ensing, Osborn ..... Detroit
Epstein, S. G. ..... Detroit
Erickson, Eldon W. ..... Detroit
Erickson, Milton H. ..... Eloise
Erkfitz, Arthur W. ..... Detroit
Eschbach, Joseph W. ..... (M) Dearborn
Estabrook, Bert U. ..... Detroit
Ettinger, Clayton J. ..... Detroit
Evans, Joseph M. ..... Detroit
Evans, Leland S. ..... Redford
Evans, Wm. A., Jr. ..... (M) Detroit
Ewing, C. H. ..... (M) Grosse Pointe

Fagin, Irving D. ..... (M) Detroit
Fair, Baxter B. ..... Detroit
Falk, I. E. ..... Detroit
Fallis, Lawrence S. ..... Detroit
Fandrich, Theodore ..... Detroit
Farbman, Aaron A. ..... Detroit
Fauman, David H. ..... Detroit
Faunce, Sherman P. ..... Detroit
Felcyn, W. George ..... Detroit
Feld, David ..... Detroit
Feldkamp, Lee E. ..... (M) Detroit
Feldman, N. L. ..... (M) Detroit
Feldstein, Martin Z. ..... (M) Detroit
Fellers, Ray L. ..... Detroit
Fendrich, Theo. S. ..... (M) Detroit
Fenech, Harold B. ..... (M) Detroit
Fenner, Wm. A. ..... Detroit
Fenton, E. H. ..... Detroit
Fenton, Meryl M. ..... (M) Detroit
Fenton, Russell F. ..... Detroit
Ferguson, Franklin F. ..... (M) Detroit
Ferrera, Louis V. ..... (M) Detroit
Ferrara, Virginia M. ..... Detroit
Fettig, Carl A. ..... Grosse Pointe Park
Field, G. S. ..... (E) Grosse Pointe
Fine, Edward ..... Detroit
Finkelstein, M. B. ..... Eloise
Fischer, Frederick J. ..... (M) Detroit
Fisher, Geo. S. ..... (M) Detroit
Fisher, O. O. ..... Detroit
Fisher, R. L. ..... Detroit
Fitzgerald, James M. ..... (M) Detroit
Fitzporter, A. L. ..... (M) Dearborn
Flaherty, H. J. ..... Detroit
Flaherty, N. W. ..... (M) Detroit
Flaherty, S. A. ..... Detroit
Fleming, L. N. ..... Detroit
Flora, Wm. R. ..... (M) Detroit
Flower, J. A. ..... Detroit
Fogt, Herbert E. ..... Detroit
Fogt, Robert G. ..... Detroit
Foley, Hugh S. ..... Dearborn
Foley, Joseph M. ..... Detroit
Font, Anthony J. ..... Detroit
Foote, James A. ..... Lincoln Park
Ford, F. A. ..... Detroit
Ford, George A. ..... Detroit
Ford, Sylvester ..... (M) Detroit
Ford, Walter D. ..... Detroit
Fordell, F. S. ..... Detroit
Forrester, Alex V. ..... Detroit
Forsythe, John R. ..... (M) Detroit
Foster, E. Bruce ..... (M) Detroit
Foster, Daniel P. ..... Detroit
Foster, Linus J. ..... Detroit
Foster, Owen C. ..... Detroit
Foster, Wm. L. ..... Detroit
Foster, W. M. ..... Detroit
Fowler, Melvin E. ..... Detroit
Fox, Morris Edward ..... (M) Dearborn
Fraiberg, Paul L. ..... Detroit
Franjac, M. J. ..... Dearborn
Franklin, James ..... Detroit
Franklin, John ..... Detroit
Franzen, Nils A. ..... Detroit
Fraser, Eldred E. ..... Detroit
Fraser, Harvey E. .. (M) Ft. Custer, Mich.
Frazer, Mary M. ..... Detroit
Free, Harry W. ..... (M) Detroit
Freedman, John ..... (M) Detroit
Freedman, Milton ..... Detroit
Freeman, D. K. ..... Detroit
Freeman, Mabel ..... Detroit
Freeman, Michael ..... Detroit
Freeman, Thelma ..... Detroit
Freeman, Wilmer ..... Detroit
Freese, John A. ..... Detroit
Fremont, Joseph C. ..... (M) Detroit
Freund, Hugo A. ..... Detroit
Fried, Bernard H. ..... (M) Detroit
Friedlaender, Alex S. ..... Detroit
Friedman, David ..... Detroit
Friedman, I. H. ..... Detroit
Frothingham, Geo. E. ..... (E) Detroit
Fruend, Henrietta ..... Detroit
Fuerbringer, Ralph O. ..... Detroit
Fullenwider, Allan C. ..... Detroit
Fuller, Hugh M. ..... (M) Detroit
Fulgenzi, Andrew A. ..... (M) Detroit

Gaba, Howard ..... (M) Detroit
Gabe, Sigmund ..... (M) Detroit
Gaberman, David B. ..... Detroit
Gaffney, J. Mitchell ..... Detroit
Galantowicz, H. C. ..... Detroit
Galdonyi, Laslo L. ..... Detroit

Galdonyi, Nicholas.....Detroit
Galerneau, D. B.....Centerline
Galvin, Paul P.....Detroit
Gamble, Parker B.....Detroit
Gannan, Arthur M.....Detroit
Ganschow, John H.....Detroit
Gariepy, L. J.....Detroit
Gardner, Lawrence.....Detroit
Garner, Howard B.....(E) Detroit
Gaston, Herbert B.....(M) Detroit
Gates, Nathaniel H.....Detroit
Gaynor, Alex.....Detroit
Gehring, Harold W.....Detroit
Gehrke, August E.....Detroit
Geib, Ledru O.....Detroit
Geib, Wayne A.....(M) Denver, Colo.
Geiter, Clyde W.....Detroit
Geitz, Wm. A.....Detroit
Gelbach, Philip D.....Detroit
Gellert, I. S.....Detroit
Gemeroy, J. C.....Detroit
Gerondale, Edmond J.....Detroit
Gibson, James C.....(E) Detroit
Giese, Fred W.....(M) Detroit
Gigante, Nicola.....Detroit
Gignac, Arthur L.....Detroit
Gilbert, Harold R.....Wyandotte
Gilbert, Roy S.....Detroit
Gillespie, Stephen M.....(M) Dearborn
Gillman, R. W.....(E) Detroit
Gingold, Samuel M.....(M) Detroit
Gingrich, Wayne A.....(M) River Rouge
Ginsberg, Harold I.....(M) Detroit
Gitlin, Charles.....(M) Detroit
Gitlin, Julius R.....Detroit
Gittins, Perry C.....Detroit
Glasgow, Gordon K.....Detroit
Glassman, Samuel.....Detroit
Glazer, Walter S.....Detroit
Gleason, John E.....Detroit
Glees, J. L.....Grosse Pointe Farms
Glement, Raymond B.....Detroit
Glowacki, B. F.....Detroit
Gmeiner, Clarence C.....Detroit
Goerke, Elmer A.....Romulus
Goetz, Angus G.....(M) Detroit
Goins, Wm. F.....Detroit
Goldberg, Arthur.....Detroit
Goldberg, Harry H.....Detroit
Goldberg, Nathan.....Detroit
Goldin, M. I.....(M) Detroit
Goldman, Perry.....(M) Detroit
Goldsmith, Joseph D.....Detroit
Goldstone, R. R.....Detroit
Gonne, Wm. S.....Detroit
Good, Wm. H.....(M) Detroit
Goodrich, B. E.....(M) Detroit
Gordon, John W.....(R) Detroit
Gordon, Wm. H.....(M) Detroit
Gorelick, Martin J.....(M) Dearborn
Gorning, Raymond P.....Detroit
Goss, Samuel B.....(M) Detroit
Gottschalk, Fred W.....Detroit
Gould, S. E.....Eloise
Gourley, E. V.....(M) Detroit
Goux, R. S.....Detroit
Grace, J. M.....Eloise
Graff, J. M.....Detroit
Grain, Gerald O.....Detroit
Grajewski, Leo E.....Detroit
Gramley, Wm.....Detroit
Granger, Francis L.....Pontiac
Grant, Heman E.....Detroit
Gratton, Henri L.....Detroit
Gravelle, Lawrence J.....Detroit
Green, Ellis R.....Detroit
Green, Lewis.....Detroit
Green, Louis M.....(M) Detroit
Green, Nelson W.....Detroit
Green, Simpson W.....Detroit
Green, Sydney H.....(M) Detroit
Greenberg, Julius J.....(M) Detroit
Greenberg, Morris Z.....(M) Detroit
Greene, John B.....Detroit
Greenidge, Robert.....Detroit
Greenlee, Wm. T.....Detroit
Greiner, Bert A.....Detroit
Grekin, Samuel L.....Detroit
Griffith, Arthur J.....Detroit
Grillo, S. Phillip.....Belleville
Grimaldi, G. J.....(M) Detroit
Grinstein, Alexander.....Detroit
Grob, Otto.....Detroit
Grossman, Sol.....(M) Detroit
Gruber, T. K.....Detroit
Gudger, James R.....(M) Detroit
Guimaraes, A. S.....Dearborn
Gurdjian, E. S.....Detroit
Gurman, Ben G.....(M) Detroit
Gutow, Benjamin R.....(M) Detroit

Haefele, Leslie P.....Garden City
Hale, Arthur S.....Detroit
Hall, E. Walter.....Detroit
Hall, James A. J.....Detroit
Hall, Ralph E.....Detroit
Hall, Robert J.....Detroit
Haluska, Joseph A.....Detroit
H'Amada, Norman K.....Detroit
Hamburger, A. C.....(M) Detroit
Hamil, Brenton M.....Dearborn
Hamilton, Norman C.....Detroit
Hamilton, Wm.....Detroit
Hamilton, Wm. F.....Detroit
Hammer, Edwin J.....Detroit
Hammer, Howard J.....(M) Detroit
Hammond, A. E.....Detroit
Hammond, James L.....Inkster
Hanna, E. Howard.....Detroit
Hansen, Frederick E.....Detroit
Hanser, Joshua.....Detroit
Hanson, Frederick N.....(M) Eloise
Hanson, Joseph.....Detroit
Harelik, E. W.....Detroit
Hardstaff, R. John.....Detroit
Hardy, George C.....Detroit
Harley, Garth H.....(M) Detroit
Harley, Louis M.....Detroit
Harm, W. B.....Detroit
Harper, Jesse T.....(M) Detroit
Harrell, Voss.....Detroit
Harris, Harold H.....(M) Detroit
Harris, Ivor D.....Detroit
Harris, Landy E.....Detroit
Harrison, Hugh.....Detroit
Harrison, Wesley.....Detroit
Hart, Charles E.....(M) Detroit
Hart, J. Clarence.....(M) Detroit
Hartman, Frank W.....Detroit
Hartmann, W. B.....Detroit
Hartzell, John B.....(M) Detroit
Hasley, Clyde K.....Detroit
Hasley, Daniel E.....Detroit
Hassig, Walter W.....(M) Detroit
Hastings, Orville J.....Detroit
Hause, Glen E.....(M) Detroit
Hauser, I. Jerome.....(M) Detroit
Hauser, John E.....Detroit
Havers, Howard.....Detroit
Hawkins, James W.....Detroit
Hayes, Joseph D.....Detroit
Heath, Leonard P.....(M) Detroit
Heath, Parker.....Detroit
Heavner, L. E.....(M) Detroit
Hecht, M.....Detroit
Hedgeman, E. C.....Detroit
Hedges, Frank W.....Detroit
Hedrick, Donald W.....Detroit
Heenan, T. H.....Detroit
Heideman, Louis.....(M) Detroit
Heldt, Thomas J.....Detroit
Hendelman, Manuel H.....Detroit
Henderson, A. B.....(M) Detroit
Henderson, Harold.....Detroit
Henderson, J. L.....Detroit
Henderson, Leslie T.....Detroit
Henderson, Wm. E.....Detroit
Henderson, Wm. W..(M) Falconer, N. Y.
Hendry, H. W.....Detroit
Henig, Fred.....(M) Detroit
Henrich, L. E.....Detroit
Herkimer, Dan R.....(M) Lincoln Park
Herrold, Rose E.....Detroit
Herschelmann, Roy F.....(M) Detroit
Hershey, Lynn N.....Detroit
Hewitt, Leland V.....Detroit
Hewitt, Robert S.....(M) Dearborn
Heyner, Stanley A.....Detroit
Hickey, Joseph.....Detroit
Hiebert, J. M.....Detroit
Higbee, Arthur L.....Detroit
Hileman, Lee.....Ecorse
Hillenbrand, Alfred E.....(M) Detroit
Hiller, Glenn I.....Detroit
Hilton, Wm. E.....Detroit
Hinko, Edward N.....Eloise
Hipp, Wm.....Detroit
Hirschman, L. J.....Detroit
Hochman, Morton M.....Detroit
Hirschfield, Alexander H.....(M) Detroit
Hodges, Roy W.....Detroit
Hodgkinson, C. P.....(M) Detroit
Hodoski, Frank J.....Detroit
Hoenig, Andrew L.....Mancelona
Hoffman, E. S.....Detroit
Hoffman, Henry A.....(M) Detroit
Hoffman, R. F.....Detroit
Hoffmann, Martin H.....Detroit
Holcomb, August A.....Northville
Holcomb, Clayton E.....Detroit
Hollander, A. J.....Detroit
Hollis, Henry B.....Detroit
Holman, Herbert H.....(M) Detroit
Holmes, Alfred W.....Detroit
Holt, Henry T.....Detroit
Honhart, Fred L.....Detroit
Honor, Wm. H.....Wyandotte
Hooker, Donald H.....(M) Detroit
Hookey, J. A.....(M) Detroit
Hooper, Norman L.....Detroit
Hoopes, Benjamin F.....(M) Detroit
Hoops, George B.....Detroit
Hopkins, J. E.....Detroit
Horan, Thomas.....(M) Detroit
Horkins, Harold A.....Detroit
Horny, Hugo.....(M) Detroit
Horton, Reece H.....Detroit
Horvath, Louis O.....Detroit
Horwitz, John B.....(M) Detroit
Hotchkiss, Loris M.....Farmington
Howard, Austin Z.....Detroit
Howard, Philip J.....Detroit
Howell, Bert F.....Detroit
Howes, Homer A.....(M) Detroit
Howlett, Howard T.....Detroit
Hromadko, Louis.....Detroit
Hubbard, John P.....Detroit
Hubbard, Ralph G.....Detroit
Hudson, A. Willis.....Detroit
Hudson, J. Stewart.....Grosse Pointe
Hudson, Wm. A.....Detroit
Huegli, Wilfrid A.....(M) Detroit
Huff, Reginald G.....Wayne
Hughes, Albertie A.....Detroit
Hull, L. W.....Detroit
Hunt, T. H.....Detroit
Hunt, Verne G.....Detroit
Hunter, Basil H.....Detroit
Hunter, C. M.....Detroit
Hunter, Elmer N.....Detroit
Husband, Charles W.....Detroit
Hussey, Raymond.....Detroit
Hyatt, Jarvis M.....(M) Detroit

Iacobell, Peter H.....(M) Detroit
Ignatius, A. A.....Detroit
Igna, Eli J.....Detroit
Insley, Stanley W.....Detroit
Irvin, Earle A.....Detroit
Irwin, W. A.....Detroit
Israel, Barney B.....(M) Detroit
Israel, J. G.....Detroit
Ivkovich, Peter.....(M) Lincoln Park

Jackson, George F.....Detroit
Jacobson, Samuel D.....Detroit
Jacoby, Myron D.....Detroit
Jaeger, Grove A.....Detroit
Jaeger, Julius P.....Detroit
Jaekel, C. N.....Detroit
Jaffar, Donald J.....Detroit
Jaffe, J. L.....Detroit
Jaffe, Jacob.....Detroit
Jaffe, Louis.....(M) Detroit
Jahsman, Wm. E.....Detroit
James, Richard G.....Detroit
Jamieson, Thomas J.....Lincoln Park
Janicki, Natalia J.....Eloise
Jarre, Hans A.....Detroit
Jarzembowski, F. B.....Detroit
Jarzynka, Frank J.....Detroit
Jasion, Lawrence J.....(M) Detroit
Jend, Wm. J.....Detroit
Jenkins, E. A.....(M) Detroit
Jenne, Byron H.....Detroit
Jennings, Robert M.....(M) Detroit
Jentgen, Charles J.....Detroit
Jentgen, L. G.....Detroit
Jewell, F. C.....Detroit
Jocz, M. W.....Grosse Pointe Park
Jodar, E. O.....Detroit
John, Hubert R.....Detroit
Johnson, Homer L.....Detroit
Johnson, Ralph A.....Detroit
Johnson, Vernon P.....Detroit
Johnson, Vincent C.....Detroit
Johnson, W. H. M.....Detroit
Johnston, Charles G.....Detroit
Johnston, Everett V.....Detroit
Johnston, J. A.....Detroit
Johnston, John L.....Detroit
Johnston, Wm. E.....Detroit
Johnstone, Benjamin I.....Detroit
Joinville, E. V.....Detroit
Jones, Arthur J.....Detroit
Jones, Adrian R.....Detroit
Jones, Edna M.....Northville
Jones, H. G.....(M) Detroit
Jones, L. Faunt.....Detroit
Jones, Roy D.....Detroit
Joyce, Stanley J.....(M) Detroit
Juliar, Benjamin.....(M) Detroit
Jurow, Harry N.....Detroit

Kalayjian, Bernard S.....Detroit
Kallet, Herbert I.....Detroit
Kallman, David.....Detroit
Kallman, Leo.....Detroit
Kallman, R. Robert.....(M) Detroit
Kamin, Louis E.....(M) Detroit
Kaminski, Ladilasus R.....Detroit
Kaminski, Zeno L.....Detroit
Kamperman, George A.....Detroit

Kanter, Herman (M) Detroit
Kapetansky, A. J. Detroit
Kapetansky, Nathan J. Detroit
Kaplita, Walter A. (M) Hamtramck
Karr, Herbert S. Detroit
Kasabach, Harry Y. (M) Detroit
Kasaback, V. Y. Detroit
Kasper, Joseph A. Detroit
Kass, Arnold (M) Detroit
Kass, J. B. Detroit
Kates, Simon C. Detroit
Katzman, I. S. Detroit
Kaump, Donald H. Detroit
Kauppinen, J. A. Detroit
Kay, Edward W. Hamtramck
Kay, Harry H. (M) Detroit
Kazdan, Louis (M) Detroit
Kazdan, Morris A. (M) Detroit
Keane, Wm. E. Detroit
Kearns, Hubert J. Detroit
Keating, Thomas F. Detroit
Keene, Clifford H. (M) Detroit
Kehoe, Henry J. East Detroit
Kemler, Walter J. Ecorse
Kemp, Hardy A. (M) Detroit
Kennary, James M. Detroit
Kennedy, Charles S. Detroit
Kennedy, Lester F. Detroit
Kennedy, Robert B. Detroit
Kennedy, Wm. Y. Detroit
Kern, W. H. Garden City
Kernkamp, Ralph Detroit
Kernick, M. O. (M) Detroit
Kersten, Armand G. Detroit
Kersten, Werner Detroit
Kerzman, Joseph H. Detroit
Keshishian, Sarkis K. Detroit
Keyes, Eugene C. Dearborn
Keyes, John W. (M) Detroit
Kibzey, Ambrose T. Detroit
Kidner, Frederick C. Detroit
Kimball, David C. (M) Detroit
Kimberlin, Kenneth K. (M) Detroit
King, Edward D. Detroit
King, Melbourne J. (M) Detroit
Kingswood, Roy C. Detroit
Kirchner, Augustus Detroit
Kirker, J. G. Detroit
Kirschbaum, Harry M. (M) Detroit
Klebba, Paul Detroit
Klein, Wm. Detroit
Kleinman, S. Detroit
Kliger, David Detroit
Kline, Lewis L. Detroit
Kline, Starr L. Detroit
Klosowski, Joseph Detroit
Klote, M. D. Detroit
Knaggs, Charles W. Grosse Pointe
Knaggs, Earl J. (M) Wyandotte
Knapp, Byron S. (M) River Rouge
Knapp, Floyd Detroit
Knobloch, Edmund J. Detroit
Knoch, Hubert S. (M) Detroit
Knox, Ross M. Ecorse
Koebel, R. H. Detroit
Koessler, George L. Detroit
Kohn, A. Max (M) Detroit
Kohn, M. E. Detroit
Kokowicz, Raymond (M) Detroit
Kopel, Joseph O. Detroit
Korby, George J. Detroit
Kosanovic, Frederick (M) Detroit
Koss, Frank R. Detroit
Kossayda, Adam W. (M) Detroit
Koster, Koert Detroit
Kovach, Emery (M) Detroit
Kovan, D. D. (M) Detroit
Koven, Abraham Detroit
Kozlow, Louise E. Detroit
Kozlinski, Anthony E. (M) Detroit
Kraft, Raymond B. Detroit
Kraft, Ruth M. Detroit
Krass, Edward W. (M) Detroit
Kraus, John J. Detroit
Krebs, Wm. T. Detroit
Kreinbring, George E. Detroit
Kretzschmar, Clarence A. Detroit
Krieg, Earl G. Detroit
Krieger, Harley L. Detroit
Kritchman, M. J. Detroit
Kroha, Lawrence Detroit
Krohn, Albert H. Detroit
Krynicki, Francis X. Detroit
Kubanek, Joseph L. Eloise
Kucmierz, Francis S. (M) Detroit
Kuhn, Albert A. (M) Detroit
Kuhn, Richard F. (M) Detroit
Kulaski, Chester H. Detroit
Kullman, Harold J. (M) Detroit
Kurcz, J. A. (M) Detroit
Kurtz, I. J. Detroit
Kwasiborski, S. A. Wyandotte

Laberge, James M. (M) Wyandotte
LaCore, Ivan (M) Pontiac
LaFerte, Alfred D. Detroit
Lakoff, Charles Detroit
Lam, Conrad R. Detroit
Lamberson, Frank A. Detroit
LaMarche, N. O. Detroit
Lammy, James V. Detroit
Lampman, H. H. Detroit
Landers, M. B., Sr. Detroit
Landers, M. B., Jr. Detroit
Lang, Ernest F. Detroit
Lang, Leonard W. Detroit
Lange, Anthony H. Detroit
Lange, Wm. A. (M) Detroit
Laning, George M. Detroit
Lansky, Mandell (M) Detroit
Lapham, Fred E. (M) Detroit
Lasley, James W. Detroit
Lassaline, S. J. Detroit
Lathrop, Philip L. Detroit
Latteier, K. K. Detroit
Laub, Stanley V. (M) Detroit
Lauppe, Edward H. Detroit
Lauppe, F. A. (M) Detroit
Law, John H. Detroit
Lawrence, Wm. C. Detroit
Lazar, Morton R. (M) Detroit
Leach, David (M) Detroit
Leacock, Robert C. Detroit
Leader, L. E. Detroit
Leaver, L. Ross Detroit
Leckie, George C. Detroit
Ledwidge, Patrick L. Detroit
Lee, Harry E. Detroit
LeGallee, George M. (M) Detroit
Lehman, Wm. L. (M) Detroit
Leibinger, Henry R. Detroit
Leipsitz, Louis S. (M) Detroit
Leiser, Rudolf Eloise
Leithauser, D. J. Detroit
Leland, Hyde S. Detroit
Leland, Sol (M) Detroit
Lemley, Clark Detroit
Lemmon, Charles E. (M) Detroit
Lemmon, Clarence W. River Rouge
Lentine, James J. (M) Detroit
Lenz, Willard R. Detroit
Lepard, C. W. Detroit
Lepley, Fred O. Detroit
Lerman, S. E. Detroit
Lescoheir, Alex W. Grosse Pointe
L'Esperance, Simon P. Detroit
Leszynski, J. S. Detroit
Leucutia, Traian Detroit
Levant, Arthur B. (M) Detroit
Levin, David M. (M) Detroit
Levin, Michael M. (M) Detroit
Levin, Samuel J. Detroit
Levine, Edward E. (M) Detroit
Levine, Sidney S. (M) Detroit
Levitt, Edward J. Detroit
Levitt, Nathan Detroit
Levy, Marvin B. Detroit
Lewin, Harry Detroit
Lewis, Charles T. Detroit
Lewis, J. Hugh (M) Wyandotte
Lewis, Wilfred J. (M) Detroit
Libbrecht, Robert V. Dearborn
Lichter, M. L. (M) Melvindale
Lichtwardt, Hartman A. East Detroit
Lieberman, B. L. Detroit
Liddicoat, A. G. Detroit
Lightbody, James J. Detroit
Lignell, Rudolph Detroit
Lilly, Charles J. Detroit
Linton, James R. Eloise
Lipinski, Stanley L. Detroit
Lipkin, Ezra Detroit
Lippold, Paul H. Detroit
Lipton, Raymond (M) Detroit
Lipschutz, Louis S. (M) Eloise
Littlejohn, David Eloise
Livingston, George D. (M) Detroit
Livingston, George M. (R) Detroit
Lockwood, Bruce C. Detroit
Lofstrom, James E. (M) Detroit
Long, Earle C. Detroit
Long, John J. Detroit
Longyear, Harold W. (M) Detroit
Lookanoff, Victor A. Detroit
Loranger, C. B. Detroit
Lorber, Joseph H. (M) Detroit
Lorentzen, Edwin H. Detroit
Lovas, W. S. (M) Detroit
Lovell, B. K. (M) Detroit
Lovering, Wm. J. Detroit
Lowe, Adolf (M) Detroit
Lowrie, G. B. Detroit
Lowrie, Wm. L., Jr. Detroit
Lowry, George L. Detroit
Luce, Henry A. Detroit
Lukas, John R. (M) Detroit
Lum, Thomas K. (M) Detroit
Lutz, Earl F. Detroit
Lynn, David H. Detroit
Lynn, Harvey D. Detroit
Lyons, L. Mason Detroit
Lyons, Wm. H. Detroit
Lytle, Robert P. (M) Detroit

Mabee, Frank P. Detroit
Mabley, J. Donald (M) Detroit
MacArthur, Robert A. Detroit
MacCracken, Frances L. Detroit
MacDougall, Orrin P. Detroit
MacFarlane, Howard W. Detroit
MacGregor, W. W. Detroit
Mack, Harold C. (M) Detroit
MacKenzie, Earle D. Detroit
MacKenzie, Edward P. (M) Detroit
MacKenzie, Frank M. Detroit
Mackenzie, John W. Grosse Pointe
Mackersie, W. G. Detroit
MacMillan, Francis B. Detroit
MacMullen, Frank B. Detroit
MacQueen, Malcolm D. Detroit
MacPherson, K. C. Detroit
Maczewski, John E. Detroit
Madsen, Martha Detroit
Magnell, Ralph C. Detroit
Maguire, Clarence E. Detroit
Mahoney, Hugh M. Detroit
Maibauer, F. P. (M) Wyandotte
Mair, Harold U. (M) Detroit
Maire, E. D. (M) Grosse Pointe
Malachowski, B. T. Detroit
Malik, Edward A. Detroit
Malik, Nur M. Detroit
Malina, Stephen Detroit
Maloney, John A. Detroit
Mancuso, Vincent Detroit
Mandiberg, Jack N. (M) Detroit
Manning, Morey H. Detroit
Maples, Douglas E. (M) Detroit
Marcotte, Oliver Detroit
Marcus, Daniel B. Detroit
Marinus, Carleton J. Detroit
Marion, Donald F. (M) Detroit
Mark, Jerome (M) Detroit
Markel, Joseph M. (M) Detroit
Markoe, Rupert C. L. Detroit
Marks, Ben (M) Detroit
Marks, Morris Detroit
Marsden, Thomas B. Detroit
Marsh, Alton R. Detroit
Marshall, James R. Detroit
Martin, Edward G. Detroit
Martin, Elbert A. Detroit
Martin, I. Herbert Detroit
Martin, J. B., Jr. Detroit
Martin, L. R. Detroit
Martin, R. M. Detroit
Martinez, P. O. Detroit
Martmer, Edgar (M) Grosse Pointe
Marwil, T. B. (M) Detroit
Mason, Percy W. Detroit
Massengile, Cleave Detroit
Mateer, John G. Detroit
Mathes, Charles J. Detroit
Maun, Mark E. Detroit
Maxwell, J. Harvey Detroit
May, Earl W. Highland Park
May, Frederick T., Jr. (M) Detroit
Mayer, E. V. Detroit
Mayer, Willard D. Detroit
Mayne, C. H. (M) Detroit
McAfee, F. W. Detroit
McAlonan, Wm. T. Detroit
McAlpine, Archibald D. Detroit
McAlpine, Gordon S. Detroit
McBroom, Russell E. Detroit
McClellan, Robert J. Detroit
McClendon, James J. Detroit
McClintock, J. J. Detroit
McClure, Robert W. (M) Detroit
McClure, Roy D. Detroit
McClure, Wm. R. Detroit
McColl, Charles W. (M) Wyandotte
McColl, Clarke M. Detroit
McColl, Kenneth M. Detroit
McCollum, E. B. (M) Detroit
McCord, Carey P. Detroit
McCormick, Colin C. Dearborn
McCormick, Crawford W. Detroit
McCormick, Frank Detroit
McCullough, Lester E. Detroit
McDonald, Angus L. Detroit
McDonald, George O. Detroit
McDonald, Grant Detroit
McDonald, Peter W. Wyandotte
McDougall, Bernard W. Detroit
McEvitt, Wm. G. Detroit
McGarvah, A. W. Detroit
McGarvah, Joseph A. Detroit
McGhee, Richard S. Detroit
McGillicuddy, Walter E. Detroit
McGinnis, Daniel H. Detroit
McGlaughlin, Nicholas D. (M) Wyandotte

McGough, Joseph M. (M) Detroit
McGraw, Arthur B. (M) Grosse Pointe Farms
McGuire, Ivan A. (M) Detroit
McGuire, M. Ruth. Detroit
McKean, G. Thomas. (M) Detroit
McKean, Richard M. (M) Detroit
McKenna, Charles J. (M) Detroit
McKinnon, John D. Detroit
McLane, Harriett E. Detroit
McLean, Don W. (M) Detroit
McLean, Harold G. Detroit
McPherson, E. Glenn. Dearborn
McPherson, R. J. Detroit
McQuiggan, Mark R. Detroit
McQuiggan, Paul. (M) Detroit
McRae, Donald H. Detroit
Mead, John. Detroit
Mead, William. Detroit
Meinecke, Helmuth A. Detroit
Mellen, Hyman S. Detroit
Melnik, Maxim P. Detroit
Menagh, Frank R. Detroit
Mendelssohn, R. J. Detroit
Merkel, Charles C. Grosse Pointe
Merrill, Wm. O. Detroit
Merriman, K. S. Detroit
Merritt, Earl G. Detroit
Metzger, Harry C. Detroit
Meyer, Ruben. Detroit
Meyers, M. P. (M) Detroit
Meyers, Solomon G. (M) Detroit
Miley, H. H. Detroit
Millard, Glenn E. Detroit
Miller, Daniel H. Detroit
Miller, Harry A. (M) Detroit
Miller, Hazen L. Detroit
Miller, Karl. (M) Detroit
Miller, Maurice P. Trenton
Miller, Myron H. Detroit
Miller, T. H. (M) Detroit
Mills, Clinton C. (M) Detroit
Mills, Georgia V. Detroit
Milton, Boynton A. Inkster
Mintz, Morris J. (M) Detroit
Mintz, Edward I. Detroit
Miral, Solomon P. Detroit
Misbelevich, Sophie. Detroit
Mitchell, C. Leslie. Detroit
Mitchell, Gertrude F. Detroit
Mitchell, Ralston S. Detroit
Mitchell, W. Bede. (M) Detroit
Moehlig, Robert C. Detroit
Moisides, V. P. Detroit
Moll, Clarence D. Detroit
Molner, Joseph G. Detroit
Moloney, J. Clark. (M) Rochester
Mond, Edward. Detroit
Monfort, Willard. Detroit
Montgomery, John C. Detroit
Montante, Joseph R. (M) Detroit
Moore, Doris Sanders. Detroit
Moore, James A. Detroit
Moore, Milridge B. Detroit
Morand, Louis J. Detroit
Morgan, Donald Nye. (M) Detroit
Moriarty, George. Detroit
Morin, John B. Detroit
Moritz, H. C. Detroit
Morley, Harold V. (M) Detroit
Morley, James A. Detroit
Morris, Harold L. Detroit
Morris, Roger S. (M) Grosse Pointe
Morrison, G. W. Detroit
Morse, Plinn F. Detroit
Morton, David G. (M) Detroit
Morton, J. B. Detroit
Mosee, W. Jones. Detroit
Mosen, Max M. Detroit
Moss, E. B. Detroit
Moss, Selma S. Detroit
Mott, Carlin P. Detroit
Moyer, Carl A. Eloise
Muellenbagen, Walter J. Detroit
Munson, F. T. Detroit
Muntyan, Andrew. Detroit
Murphy, D. J. (M) Detroit
Murphy, Frank J. (M) Detroit
Murphy, John M. (M) Detroit
Murphy, Scipio G. Detroit
Murphy, W. M. Detroit
Murray, George M. Detroit
Murray, Wm. A. Detroit
Muske, Paul H. (M) Detroit
Myers, Dan W. (M) Detroit
Myers, George P. Detroit
Myers, Gordon B. Grosse Pointe

Nagel, Oscar. (M) Detroit
Nagle, John W. (M) Wyandotte
Naud, Henry J. Detroit
Nawotka, E. E. Detroit
Naylor, A. E. Detroit
Naylor, Arthur H. Detroit
Neeb, Walter G. (M) Detroit
Nelson, Darwin M. (M) Detroit
Nelson, Harry M. Detroit
Nelson, Victor E. (M) Detroit
Neumann, Arthur J. Detroit
Newbarr, Arthur A. Detroit
Newman, Max K. Detroit
Nielsen, Aage E. (M) Detroit
Nichamin, Samuel J. (M) Detroit
Nickels, Albert W. (M) Detroit
Nickerson, I. Dean. (M) Detroit
Nigro, Norman D. (M) Detroit
Nill, John B. Detroit
Nill, Wm. F. Detroit
Nixdorf, Wallace B. (M) Detroit
Noer, Rudolf J. (M) Grosse Pointe Farms
Nolan, Bernard E. Detroit
Nolting, Wilfred S. (M) Detroit
Norconk, A. A. (M) Detroit
Norris, Edgar H. Detroit
Northrop, Artbur K. Detroit
Norton, A. B. Detroit
Norton, Chas. S. Detroit
Noth, Paul H. Grosse Pointe Farms
Novy, R. L. Detroit
Nowicki, Joseph A. Detroit

O'Brien, E. J. Detroit
O'Brien, G. M. Detroit
O'Donnell, Charles. Dearborn
O'Donnell, David H. (E) Detroit
O'Donnell, Dayton H. (M) Detroit
Ohmart, Galen B. Detroit
O'Hora, James T. Detroit
Ohrt, Harold F. Detroit
Olen, Alex. (M) Detroit
Olechowski, Leo W. (M) Grosse Ile
Olmsted, Wm. R. Detroit
Oman, Cyrus F. Detroit
Oppenheim, J. M. (M) Detroit
Organ, Fred W. Detroit
Ormond, John K. Detroit
Orecklin, L. Detroit
Ornstein, Charles. Detroit
O'Rourke, Paul V. Detroit
O'Rourke, R. M. Detroit
Osius, Eugene A. (M) Detroit
Ott, Harold A. (M) Detroit
Ottaway, John P. (M) Detroit
Owen, Clarence I. (M) Detroit
Owen, James A. Detroit

Palmer, Alice. Detroit
Palmer, Hayden. Detroit
Palmer, R. Johnston. Detroit
Pangburn, L. E. Detroit
Panic, Stephen M. Detroit
Panzner, Edward J. Detroit
Parker, Albert R. Wayne
Parker, Benjamin R. (M) Detroit
Parker, Walter R. (E) Detroit
Parr, R. W. Detroit
Parsons, John P. Grosse Pointe Park
Pasternacki, Norbert T. Detroit
Paterson, Walter G. Detroit
Patton, Henry S. (M) Detroit
Pawlowski, Jerome. Detroit
Paysner, Harry A. Detroit
Peabody, Charles W. (M) Detroit
Peacock, Lee W. Highland Park
Pearse, Harry A. Detroit
Peggs, George F. (M) Detroit
Pelczar, Walter. (M) Detroit
Penberthy, Grover C. (M) Detroit
Pendy, John M. (M) Detroit
Pensler, Meyer. (M) Detroit
Pequegnot, Charles F. Detroit
Perdue, Grace M. Detroit
Perkin, Frank S. (M) Detroit
Perkins, Ralph A. New York City
Perlis, H. L. Detroit
Perry, Alvin L. (M) Detroit
Peterman, Earl A. Detroit
Petix, Samuel C. Detroit
Pevin, Pauline. Detroit
Pfeffer, Isadore S. (M) Detroit
Pfeiffer, Rudolph L. Detroit
Pickard, Orlando W. Detroit
Pierce, Frank L. Detroit
Pierson, Max J. Detroit
Pietraszewski, A. W. Detroit
Pilling, M. A. Detroit
Pinckard, Karl G. Detroit
Pink, Rose M. Detroit
Pinney, Lyman J. Detroit
Pino, Ralph H. Detroit
Piper, Ralph R. Detroit
Plaggemeyer, H. W. Detroit
Pliskow, Harold. (M) Detroit
Podezwa, John W. (M) GrossePoint Woods
Pollack, John J. Detroit
Pool, Walter D. Detroit
Poole, Marshall W. (M) Detroit
Poos, Edgar. Detroit
Porretta, Anthony C. Detroit
Porretta, F. S. Detroit
Porter, Howard J. Romulus
Posner, Irving. Detroit
Pratt, Jean P. Detroit
Pratt, Lawrence. (M) Detroit
Prendergast, John J. Detroit
Priborski, Benjamin H. Detroit
Price, A. H. Detroit
Price, Alvin Edwin. (M) Detroit
Proctor, Bruce. Detroit
Proud, Robert H. Flat Rock
Pugliesi, Benedetto. Detroit
Purcell, Frank H. Detroit
Putra, A. M. (M) Grand Rapids

Quigley, Wm. Detroit

Rabinovitch, Bella. Detroit
Rahm, Lambert P. (M) Detroit
Raiford, Frank P. Detroit
Rand, Morris. Detroit
Rao, John O. Detroit
Raskin, John. Detroit
Raskin, Morris. Detroit
Rastello, Peter B. Detroit
Ratigan, C. S. Dearborn
Raynor, Harold F. Detroit
Reberdy, George J. Detroit
Reder, Ben. (M) Detroit
Reed, E. Hobart. Detroit
Reed, H. Walter. Detroit
Reed, Ivor E. Detroit
Rees, Howard C. Detroit
Reichling, R. J. (M) Detroit
Reid, J. Gilbert. (M) Detroit
Reid, Wesley G. (M) Detroit
Reiff, Morris V. (M) Detroit
Reinbolt, Charles A. Detroit
Reinsh, Ernest R. (M) Detroit
Reisman, Natban J. Detroit
Rekshaw, W. R. (M) Detroit
Renaud, G. L. (E) Detroit
Rennell, Leo P. Detroit
Renz, Russell H. Detroit
Reske, Alven. (M) Dearborn
Reveno, Wm. S. Detroit
Rexford, Walton K. Detroit
Reye, H. A. Detroit
Reyner, C. E. Detroit
Reynolds, R. P. Detroit
Rezanka, Harold J. Detroit
Rhoades, F. P. Detroit
Rice, Harold B. Detroit
Rice, Mesbel. (M) Oxford
Richardson, Allan L. Detroit
Richardson, Robert P. Wayne
Rick, Paul J. Detroit
Ridge, Ralph W. Wyandotte
Rieden, James A. Detroit
Rieckhoff, George G. Detroit
Rieger, John B. Detroit
Rieger, Mary H. Detroit
Riseborough, E. C. Detroit
Rizzo, Frank. Grosse Pointe Park
Robb, Edw. L. Detroit
Robb, Herbert F. Belleville
Robb, J. Milton. Grosse Pointe Village
Roberts, Arthur J. Ecorse
Roberts, Stanley B. Detroit
Robertson, Tom H. Detroit
Robins, Samuel C. Detroit
Robinson, Edwin L. Detroit
Robinson, Fred L. Dearborn
Robinson, George W. Detroit
Robinson, Howard. (M) Detroit
Robinson, John. Detroit
Robinson, R. G. Detroit
Rogers, Aaron Z. Grosse Pointe Woods
Rogers, James D. Wyandotte
Rogin, James R. Detroit
Rogoff, A. S. (M) New York
Rohde, Paul C. Detroit
Roland, Charles F. Detroit
Rom, Jack. (M) Detroit
Roman, Stanley J. (M) Detroit
Roney, Eugene H. (M) Detroit
Root, Charles T. (M) Detroit
Rosbolt, Oscar P. Detroit
Rose, Bernard. Detroit
Rosen, Robert. Detroit
Rosenberger, Homer. (M) Detroit
Rosenman, J. D. Detroit
Rosenthal, Louis H. (M) Detroit
Rosenthal, Samuel. (M) Detroit
Rosenwach, Felix E. (M) Detroit
Rosenzweig, Saul. Detroit
Ross, D. G. Grosse Pointe
Ross, Ben C. (M) Detroit
Ross, Hyman. (M) Dearborn
Ross, Samuel H. (M) Dearborn
Rotarius, E. M. Detroit
Roth, Edward T. Detroit

Roth, Theodore I. (M) Detroit
Rothbart, H. B. Detroit
Rothman, Emil D. Detroit
Rothman, H. R. (M) Detroit
Rottenberg, Leon. (M) Detroit
Rowell, Robert C. Eloise
Rubright, Leroy W. (M) Detroit
Rucker, Julian J. Detroit
Rueger, Milton J. (M) Detroit
Rueger, Ralph C. Detroit
Runge, Edward F. Detroit
Rupprecht, Emil F. (M) Detroit
Ruskin, I. W. Detroit
Ruskin, Samuel H. Detroit
Russell, John C. Detroit
Ryan, Charles F. Detroit
Ryan, W. D. Detroit
Rydzewski, Joseph B. Detroit
Ryerson, Frank L. Detroit

Sacbs, Herman K. (M) Detroit
Sack, A. G. (M) Detroit
Sa'di, Lutfi. Detroit
Sadowski, Roman. Detroit
Sage, Bernard A. (M) Detroit
Sage, Edward O. Detroit
Sage, Thomas. Detroit
Sager, E. L. Detroit
St. Amour, Hector J. Detroit
St. Louis, R. J. River Rouge
Sakorrapbos, Stelios N. Detroit
Salchow, Paul T. Detroit
Salowich, John N. (M) Detroit
Saltzstein, Harry C. Detroit
Sand, Harry H. (M) Detroit
Sander, I. W. Detroit
Sanders, Alex W. Detroit
Sanders, John H. (M) Detroit
Sanderson, Alvord R. Grosse Pointe Park
Sanderson, Joseph L. (M) Detroit
Sanderson, Suzanne. Detroit
Sandler, Nathaniel. (M) Detroit
Sands, G. E. Detroit
Sandweiss, David J. Detroit
Sanford, Hawley S. (M) Detroit
Sargent, Wm. R. Detroit
Sauk, John J. (M) Detroit
Sauter, Simon H. Detroit
Savignac, Eugene M. (M) Detroit
Scarney, Herman D. (M) Detroit
Schaefer, Robert L. (M) Detroit
Schaeffer, Martin. Detroit
Schembeck, I. S. Detroit
Schenden, A. J. Melvindale
Schiller, A. E. Detroit
Schilling, Charles E. Detroit
Schinagel, Geza. Detroit
Schirack, Ray. Detroit
Schlacht, George F. Romulus
Schlafer, Nathan H. Detroit
Schlemer, John H. Detroit
Schlesinger, Henry. (M) Detroit
Schmidt, Harry E. (M) Dearborn
Schmidt, J. Robert. (M) Detroit
Schmidt, Milton R. (M) Trenton
Schmier, Burton L. Detroit
Schmitt, Norman L. Detroit
Schneck, Robert J. Detroit
Schneider, Curt P. (M) Detroit
Schoenfield, Gilbert D. Detroit
Schorr, Robert L. (E) Detroit
Schooten, Sarah S. Detroit
Schreiber, Frederick. Detroit
Schrier, C. F. (M) Detroit
Schroeder, Carlisle F. (M) Detroit
Schug, Richard H. (M) Detroit
Schulte, Carl H. Detroit
Schultz, Ernest C. Detroit
Schultz, Robert F. (M) Detroit
Schwartz, Ben. Detroit
Schwartz, H. Allen. Detroit
Schwartz, Louis A. (M) Detroit
Schwartz, Oscar D. (M) Detroit
Schwartzberg, Joseph A. (M) Detroit
Schweigert, C. F. (M) Detroit
Sciarrino, Stanley V. Detroit
Scott, R. J. (M) Detroit
Scott, Wm. J. Grosse Pointe Farms
Scruton, Foster D. Detroit
Seabury, Frank P. Detroit
Secord, Eugene W. Detroit
Seeley, James B. Dearborn
Seeley, Ward F. Detroit
Segar, Lawrence F. Detroit
Seibert, Alvin H. Grosse Pointe Park
Seiferlein, Archie L. (M) Detroit
Selby, C. D. Detroit
Sellers, Charles W. Detroit
Sellers, Graham. Detroit
Selling, Lowell. Detroit
Selman, J. H. Detroit
Sewell, George S. Detroit
Shafarman, Eugene. Detroit
Shaffer, Joseph H. (M) Duluth, Minn.
Shaffer, Loren W. Detroit
Shafter, Royce R. Detroit
Shankwiler, Reed A. Detroit
Shannon, Wm. F. (M) Detroit
Shanoski, Stanley J. (M) Detroit
Shapiro, I. Allen. (M) Detroit
Shapiro, Jacob. (M) Detroit
Shapiro, Oscar U. Detroit
Shapiro, Reuben I. (M) Detroit
Sharp, Martin C. Detroit
Sharrer, Charles H. Detroit
Shaw, Norman D. Dearborn
Shaw, Robert G. Detroit
Shawan, H. K. Detroit
Shebasta, Emil. (M) Muskegon
Sheldon, John A. Detroit
Shelton, C. F. (M) Detroit
Sheppard, Emma L. W. Detroit
Sheppard, Wm. B. (M) Pensacola, Fla.
Sherman, Boudana B. Detroit
Sherman, Louis L. Detroit
Sherman, Wm. L. Detroit
Sherrin, Edgar R. (M) Detroit
Sherwood, DeWitt L. Detroit
Shewchuk, Alexander P. (M) Detroit
Shields, W. L. Detroit
Shifrin, Peter G. (M) Detroit
Shiovitz, Louis. (M) Detroit
Shipton, W. Harvey. Detroit
Shlain, Benjamin. Detroit
Shoenfield, Adolph. Detroit
Shore, O. J. Detroit
Shorney, Brain T. Detroit
Shotwell, Varlos W. Detroit
Shulak, Irving B. (M) Detroit
Shumaker, Edw. J. (M) Detroit
Shurley, Burt R. Detroit
Sickels, Edward W. (M) Detroit
Siddall, Roger S. Detroit
Sieber, Edward H. Dearborn
Siefert, John L. (M) Detroit
Seifert, Wm. A. Detroit
Siegel, Henry. (M) Detroit
Silvarman, I. Z. Detroit
Silver, Israel W. Detroit
Silverman, M. M. Detroit
Simon, Emil R. Detroit
Simons, Edward J. (M) Detroit
Simpson, C. E. Detroit
Simpson, H. Lee. Detroit
Singer, Floyd W. Detroit
Sippola, Geo. W. Detroit
Sisson, John M. Detroit
Siwka, Isidore J. Detroit
Skinner, W. Clare. Detroit
Skolnick, Max H. (M) Detroit
Skrzycki, Stephen S. Detroit
Skully, E. J. Detroit
Sladen, Frank J. Detroit
Slahetka, Vincent. (M) Detroit
Slate, Raymond N. Detroit
Slaughter, Fred M. Detroit
Slaugenhaupt, J. G. Detroit
Slazinski, Leo W. Detroit
Slipson, Edith G. Detroit
Slevin, John G. (M) Detroit
Sliwin, Edward P. (M) Detroit
Small, Henry. (M) Detroit
Smeck, Arthur R. Detroit
Smeltzer, Merrill. (M) Detroit
Smith, Charles E. Detroit
Smith, Clarence V. Detroit
Smith, Claude A. River Rouge
Smith, F. Janney. Detroit
Smith, Gerrit C. Detroit
Smith, Henry L. Detroit
Smith, J. Allen. (M) Detroit
Smith, James A. Detroit
Smith, Vine L. Detroit
Smyka, Edward J. (M) Detroit
Smyth, Charley J. Eloise
Snedeker, Bernard C. (M) Detroit
Snow, L. W. Northville
Snyder, Arthur M. Detroit
Socall, Charles J. (M) Detroit
Sokolov, Raymond A. (M) Detroit
Somers, Donald C. (M) Detroit
Sonda, Lewis P. Detroit
Sorock, Milton L. (M) Detroit
Spademan, Loren C. Detroit
Spalding, Edward D. (M) Detroit
Sparling, Harold I. (M) Northville
Sparling, Irene L. Northville
Speck, Carlos C. Allen Park
Spector, Maurice J. (M) Detroit
Spero, Gerald D. Detroit
Sperry, Frederick L. Detroit
Spiro, Adolpb. (M) Detroit
Springborn, B. R. Detroit
Sprunk, Carl. (M) Detroit
Sprunk, John P. Detroit
Spurrier, Ethelbert. (M) Detroit
Squires, W. H. Eloise
Stafford, Frank W. J. Detroit
Stalker, Hugh. Grosse Pointe
Stamell, Benjamin B. (M) Detroit
Stamwell, Meyer. (M) Unknown
Staniszowski, Casimir. Detroit
Stanton, James M. Detroit
Stanton, Myron. Detroit
Stapleton, Wm. J., Jr. Detroit
Starrs, Thomas C. Detroit
Steele, Hugh. Detroit
Stefani, E. L. Detroit
Stefani, Raymond T. (M) Detroit
Steffes, Everett M. (M) Berkley
Stein, Edward. (M) Detroit
Stein, Albert H. (M) Detroit
Stein, Emory. Detroit
Stein, Saul C. (M) Van Dyke
Steinbach, Henry B. Detroit
Steinberger, Eugene. Detroit
Steiner, Gabriel. Detroit
Steiner, Louis J. Detroit
Steiner, Max. (M) Detroit
Steinhardt, Milton J. (M) Detroit
Stellhorn, Chester E. Detroit
Stellhorn, Mary Christine. Detroit
Sterba, Richard. Detroit
Sterling, Lawrence. Detroit
Sterling, Robert R. Detroit
Stern, Harry L. Detroit
Stern, Leonard H. Detroit
Stern, Louis D. Detroit
Stewart, Thomas O. Detroit
Stiefel, Daniel M. Detroit
Stirling, Alex M. Detroit
Stith, Dwight E. Detroit
Stobbe, Godfrey. (M) Detroit
Stockwell, B. W. (M) Detroit
Stokfisz, T. (M) Detroit
Stout, Lindley H. Detroit
Straith, Claire L. Detroit
Strand, Martin E. (M) Dearborn
Stricker, Henry D. Detroit
Strickroot, Fred L. (M) Detroit
Strohschein, Don F. Detroit
Stubbs, C. T. Detroit
Stubbs, Harold W. Detroit
Stuecheli, Milton B. Detroit
Sugar, David I. Detroit
Sugarman, Marcus H. (M) Detroit
Sullivan, Hugh A. Detroit
Summers, Wm. S. Detroit
Summus, Wm. A. (M) Detroit
Surbis, John P. Detroit
Sutherland, J. M. Detroit
Swanson, Carl W. Detroit
Swanson, Cleary N. Detroit
Swanson, R. G. (M) Detroit
Swift, Karl L. Detroit
Switzer, Bertrand C. Detroit
Szappanyos, Bela T. Detroit
Szedja, J. C. (M) Detroit
Szilagyi, Emerick D. Detroit
Szmigiel, A. J. Detroit

Tamblyn, E. J. Detroit
Tann, H. E. Detroit
Tapert, Julius C. Detroit
Tasker, Helen. Detroit
Tassie, Ralph N. Detroit
Tatelis, Gabriel. Detroit
Taylor, Ivan B. (M) Detroit
Taylor, Nelson M. (M) Grosse Pointe
Taylor, Reu Spencer. Detroit
Tear, Malcolm J. (M) Detroit
Teitelbaum, Myer. (M) Detroit
Tenaglia, Tbomas A. (M) Ecorse
Tenerowicz, Rudolph G. Detroit
Test, Frederick C. II. Detroit
Texter, Elmer C. Detroit
Thompson, Alderman. Detroit
Thompson, H. E. Detroit
Thompson, H. O. (M) Detroit
Thompson, W. A. Detroit
Thomson, Alexander. Detroit
Thornell, Harold E. Detroit
Thorstad, Merrill. Detroit
Thosteson, George C. Detroit
Thurston, Roger G. (M) Detroit
Tichenor, E. D. Detroit
Toepel, Otto T. (E) Detroit
Tomsu, Charles L. Detroit
Top, Franklin H. Detroit
Townsend, Frank M. Detroit
Trask, Harry D. Detroit
Tregenza, W. Kenneth. (M) Detroit
Troester, George A. (M) Detroit
Trombino, James F. Detroit
Trombley, Bryan. Detroit
Trombley, Joseph J., Jr. (M) Detroit
Troxell, Emmett C. Detroit
Truszkowski, E. G. (M) Detroit
Trythall, S. W. Detroit
Tufford, Norman G. Detroit
Tulloch, John. (M) Detroit
Tupper, Roy D. Detroit

Turbett, Claude W. Detroit
Turcotte, Vincent J. Detroit
Turkel, Henry Detroit
Tuttle, Wm. M. (M) Detroit
Tyson, Wm. E. E. Detroit

Ujda, Chester J. Wayne
Ulbrich, Henry L. Detroit
Ulch, Harold W. Detroit
Ulrich, Willis H. (M) Detroit
Umphrey, Clarence E. Detroit
Usher, William K. Detroit

Vale, C. Fremont Detroit
VanAuken, Edward A. (M) Detroit
Van Baalen, M. R. Detroit
Van Gundy, Clyde R. Detroit
Van Heldorf, Harry Detroit
Van Nest, A. E. Detroit
Van Rhee, George Detroit
Van Riper, Steven L. Detroit
Vardon, Edward M. Detroit
Vasu, V. O. Detroit
Vergosen, Harry E. (M) Detroit
Vincent, James L. Detroit
Virga, George M. (M) Detroit
Voegelin, Adolph E. Detroit
Vogel, Hymen A. Detroit
Vokes, Milton D. Detroit
Von der Heide, E. C. Detroit
Vossler, A. E. Detroit
Vreeland, Emerson Detroit

Waddington, Joseph E. G. (E) Detroit
Wadsworth, George H. (M) Detroit
Waggoner, C. Stanley Detroit
Waggoner, Lyle G. Detroit
Wainger, M. J. Detroit
Wainstock, Michael Detroit
Waldbott, George L. Detroit
Walker, Enos G. (M) Detroit
Walker, J. Paul Detroit
Walker, Leo W. Detroit
Walker, Roger V. Detroit
Wallace, S. Willard Detroit
Walls, Arch Detroit
Walser, Howard C. Detroit
Walsh, Charles R. Detroit
Walsh, Francis P. Detroit
Walters, Albert G. Detroit
Waltz, Frank D. B. Detroit
Waltz, Paul J. Detroit
Ward, Wm. K. Detroit
Warden, Horace F. W. Detroit
Warner, P. L. Detroit
Warner, Harold W. (M) Detroit
Warren, Lloyd P. Detroit
Warren, Wadsworth (M) Detroit
Warren, Kenneth W. Detroit
Wasserman, Lewis C. Detroit
Waszak, Charles J. Detroit
Watson, Douglas J. (M) Detroit
Watson, Harwood G. Dearborn
Watson, J. Edwin Detroit
Watson, Robert W. Highland Park
Watts, Frederick B. (M) Detroit
Watts, John J. Detroit
Wayne, M. A. Detroit
Weaver, Clarence E. Detroit
Weaver, Delmar F. Grosse Pointe
Webster, John E. (M) Detroit
Weed, Milton R. (M) Detroit
Wehenkel, Albert M. Detroit
Weiner, M. B. Detroit
Weingarden, David H. Detroit
Weinstein, Jacob Detroit
Weisberg, A. Allen Detroit
Weisberg, Jacob (M) Detroit
Weiser, Frank A. Detroit
Weiss, C. P. (M) Detroit
Weiss, J. G. (M) Detroit
Welch, John H. Detroit
Weller, Charles N. Detroit
Wells, Martha Detroit
Weltman, Carl G. Detroit
Wendel, Jacob S. Detroit
Wenzel, Jacob F. Detroit
West, Howard Gaige Detroit
Weston, Bernard Detroit
Weston, Earl E. Detroit
Weston, Horace L. (M) Detroit
Westover, Charles Plymouth
Weyher, Russell F. Detroit
Whalen, Neil J. Detroit
Wharton, Thomas V. Wyandotte
Wheeler, Stewart C. (M) Detroit
Whinnery, Randall A. Detroit
White, Milo R. Detroit
White, Milton W. Detroit
White, Prosper D., Jr. (M) Detroit
White, Theodore M. Detroit
Whitehead, L. S. (M) Detroit
Whitehead, Walter K. Detroit
Whiteley, Robert K. (M) Detroit
Whitney, Elmer L. Detroit
Whitney, Rex E. (M) Detroit
Whittaker, Alfred H. Detroit
Wiant, R. E. Detroit
Wickham, A. B. Detroit
Wiechowski, Henry (M) Detroit
Wiener, I. (M) Detroit
Wietersen, Fred K. (M) Detroit
Wight, Fred B. Detroit
Wilcox, Leslie F. (M) Detroit
Wilkinson, Arthur P. Detroit
Williams, C. J. Detroit
Wills, J. N. Detroit
Willson, Wesley W. (M) Detroit
Wilner, Irvin Detroit
Wilson, Chas. Stuart (M) Detroit
Wilson, Frederic S. Detroit
Wilson, Gerald A. Detroit
Wilson, M. C. (M) Detroit
Wilson, Walter J. Detroit
Wilson, Walter J., Jr. (M) Detroit
Winfield, James M. (M) Detroit
Winton, George L. (M) Detroit
Wiren, Lennart W. Detroit
Wishropp, Edward A. (M) Grosse Pointe
Wisner, Harold E. Detroit
Wissman, H. C. Detroit
Wittenberg, Arthur A. Detroit
Wittenberg, Samson S. Detroit
Wittenberg, Sydney S. Detroit
Witter, Frank C. Detroit
Witter, Joseph A. (M) Detroit
Witus, Carl (M) Detroit
Witus, Morris Detroit
Witwer, Eldwin R. Detroit
Wolfe, Max O. Detroit
Wollenberg, Robert A. C. Detroit
Wood, Kenneth A. (M) Detroit
Woodburne, H. L. (M) Detroit
Woodry, Norman L. Detroit
Woods, H. B. Brown City
Woods, W. Edward Detroit
Woodworth, Wm. P. Detroit
Worzniak, Joseph J. Wyandotte
Wreggit, W. R. (M) Detroit
Wrnble, Joseph Detroit
Wunsch, Richard E. (M) Detroit
Wygant, Thelma Dearborn

Yesayian, H. G. Detroit
York, Frederick P. (M) Detroit
Yott, Wm. J. (M) Detroit
Young, Donald Andrew (M) Detroit
Young, Donald C. (M) Detroit
Young, Lloyd B. (M) Detroit
Young, Viola M. Detroit

Zawadzki, Edward S. (M) Dearborn
Zbudowski, A. S. (M) Hamtramck
Zbudowski, Myron R. (M) Hamtramck
Zemens, Joseph L. Detroit
Zerbi, Victor Detroit
Zielinski, Charles J. Detroit
Zimmerman, Israel J. (M) Detroit
Zimmerman, R. L. Detroit
Zinn, George H. Detroit
Zinterhofer, John Detroit
Zinterhofer, Louis Detroit
Zlatkin, Louis Detroit
Zuelzer, Wolfgang Detroit
Zukowski, Sigmund A. (M) Detroit

Wexford County

Albi, R. W. (M) Gary, Ind.
Daugherty, R. (M) Cadillac
Hoagland, F. L. (M) Unknown
Holm, Augustus Leroy
Holm, Benton Cadillac
Hoverter, J. W. Evart
Inman, J. C. (M) Lake City
Landy, George R. Cadillac
Lommen, Ralph Manton
McCall, James Lake City
McManus, Edwin Mesick
Masselink, H. J. McBain
Merritt, C. E. Manton
Mills, Robert E. Boon
Moore, G. P. (M) Cadillac
Moore, Sair C. Cadillac
Murphy, Michael R. Cadillac
Purdy, Calvin S. Buckley
Seltzer, Sol N. (M) Marion
Showalter, Laurence E. (M) Cadillac
Smith, Fred R. (M) Lake City
Smith, Wallace J. Cadillac
Tornberg, Gordon C. Cadillac

RAGWEED POLLEN SURVEY

The report of the 1945 state-wide ragweed pollen survey is now available from the Michigan Department of Health. Michigan had much less ragweed pollen last summer and for a shorter season than in 1944.

Because the majority of hay fever sufferers feel no discomfort until the pollen concentration is above 100 grains per cubic yard of air, the pollen season is defined as the number of days when the count is above 100. Last summer the pollen season varied from twenty-eight days in Hillsdale to one day in Houghton.

The Upper Peninsula and the northern half of the lower peninsula have lower pollen concentrations and a shorter pollen season than southern Michigan. This has been observed in each of the six pollen surveys.

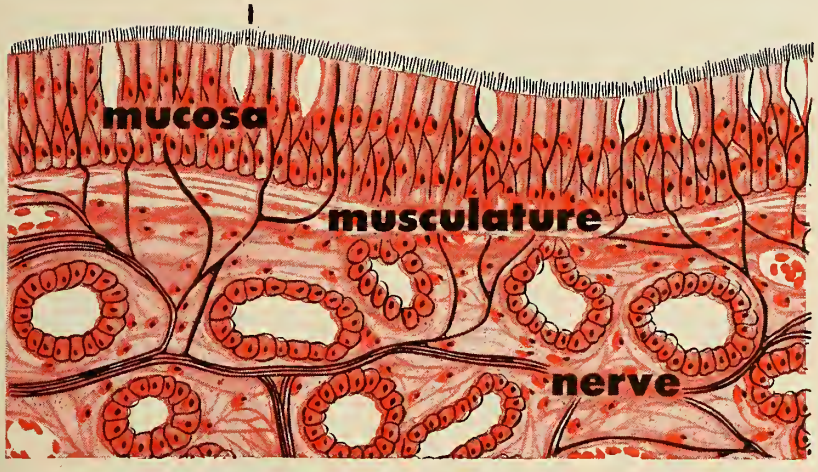
The greatest amount of pollen at each pollen-collecting station was found between August 27 and September 8. Pollen counts seldom reach 100 before August 15 and drop quickly with the first killing frosts.

Of the areas where pollen was collected in 1945, the shortest pollen season was observed in Houghton where the pollen count went over 100 grains only one day; Isle Royale and Ontonagon with two days; St. Ignace, Marquette and Rogers City with three days each; and Sault Ste. Marie with four.

The longest pollen season of twenty-eight days occurred in Hillsdale; Lansing and Coldwater had twenty-six each; Saginaw and Flint twenty-four, and Detroit, twenty-three.

The seventh ragweed pollen survey will be conducted this summer. Pollen will be collected at about fifty places in the state and counts for twenty-four hour periods will be given to the public through news agencies.

respiratory mucous membrane . . .
bronchiolar musculature . . .
central nervous system . . .



All three are involved in the pathologic physiology of allergic manifestations of the respiratory tree.

Each structure can be successfully and simultaneously treated with

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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

NEW DYSENTERY STRAIN IN MICHIGAN

In June the Michigan Department of Health Laboratories isolated a strain of dysentery which is new to Michigan, the Sach's Q 711. This organism is fairly common in North Africa. The organism was recovered from a case of acute baccilary dysentery in a nine-year-old boy in Bay County.

MARRIAGES

Marriages in Michigan hit an all-time high during the first three months of 1946 when 15,379 were recorded. This is an 88 per cent increase over the same period of 1945 and well above the five year average of 9,479. In 1942, Michigan's peak year for marriages, there were 11,652 marriages reported in the first three months.

Breaking a ten-year record in which March was the lowest month for marriages, the largest number of the 1946 marriages, 6,128 in all, was reported in March.

DR. LILLIAN R. SMITH RETIRES

Dr. Lillian R. Smith, director of the Bureau of Maternal and Child Health, is retiring on June 30, 1946. Dr. Smith came to the Michigan Department of Health in March, 1924, to serve as prenatal consultant. In 1925 she became director of the Bureau.

Dr. Goldie B. Corneliuson, who has been associate director of the Bureau for the past four years, will succeed Dr. Smith.

EMIC COMPLETES THREE YEARS

Hospital and medical care has been authorized in Michigan for 44,634 wives and infants of servicemen since the Emergency Maternity and Infant Care program began in Michigan on May 27,1943. For this care the federal government has spent $3,755,113.

The average cost for each maternity case is $98.06 and for each sick infant, $60.83.

The peak of applications came in August, 1944, when 1,871 were received. During 1946 applications have averaged 1,631 a month.

A total of 3,243 physicians and 185 hospitals in Michigan participate in this program.

MALARIA

A total of 445 cases of malaria was reported to the Michigan Department of Health between January 1 and June 6. The interesting thing about these 445 cases is that they are all cases of recurrent malaria contracted outside of Michigan. There have been no cases of malaria among our resident citizens. This is to be expected, of course, since there have been no mosquitoes during this period. There is a possibility that there will be small localized outbreaks of malaria during the mosquito season since the southern half of the lower peninsula of Michigan has a high percentage of Anopheles mosquitoes. State and local health departments are maintaining alphabetical files on these cases of recurrent malaria so that the location of possible foci of infection is known. If malaria develops among the citizens of Michigan, it can be brought under control rapidly by the use of DDT and other agents for the destruction of mosquitoes.

SWIMMERS' ITCH CONTROL PROGRAM

On June 15 two units from the Michigan Stream Control Commission resumed the snail-eradication program in northern Michigan. This is the seventh summer that the commission has sent men and chemical distributing equipment into the northern resort country to help beach owners control "swimmers' itch."

This will probably be the last summer for the program, according to Milton P. Adams, secretary of the commission, since it was started as a demonstration. Now that the value of chemical treatment has been proved, the commission feels that responsibility in the future should be assumed by individual resort proprietors and interested groups.

Chemical treatment of infected water areas is done with a portable chemical-mixing and distributing unit, designed and built by Professor E. P. Wiedenhoefer of Michigan College of Mining and Technology, a summer employe of the commission. This unit is mounted in an ordinary flat bottom row boat. Into water, taken from over the side of the boat by pump, is injected a mixture of dry chemical which consits of about five parts of copper sulfate (snow grade) and one part of hydrated lime. The mixture passes through the discharge pipe from the pump out over the stern of the boat and is fed from a pipe "header" attached to the stern of the boat onto the lake bottom over a strip of beach ten to twelve feet in width created by the forward movement of the boat. A number of lengths of hose attached to the header and trailing from the rear of the boat are weighted at the outlet end so as to introduce directly on the sand bottom approximately a six-inch layer of copper sulfate solution. This kills the snails within a few hours, without injury to human beings, free swimming fish, clams and other aquatic life. With a thorough "kill" of the snail hosts and, with them, their parasite "chains," water itch disappears until a new crop of snails returns, generally in from two to four years.

PROTECTING VACATION VISITORS

Testing of roadside water supplies, discontinued in most counties during the war, is being resumed this year as city, county, district and state health departments begin the roadside and resort sanitation program which will

(Continued on Page 970)

Effective Against CHIGGERS

(RED BUGS)



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DURING THE COMING SEASON this timely prescription product will bring relief and grateful thanks from patients suffering from chiggers.

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...safety, minimizing the possibility of sulfur dermatitis

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PROTECTING VACATION VISITORS

(Continued from Page 968)

touch each of Michigan's eighty-three counties and some 9,000 miles of highways.

Water supplies will be inspected and samples tested, sewage disposal methods checked, camps and resorts inspected, food and milk supplies and handling facilities checked, swimming places approved and polluted lakes and streams posted with warning signs.

The purpose of this program is to make sure that all sanitary facilities of rural and resort areas, which normally serve a sparse population, are prepared to meet the needs of millions of summer visitors.

Testing of roadside water supplies was begun in May in an effort to get all supplies posted before the heavy tourist travel began. The majority of the wells tested are in filling stations and roadside parks; the aim of the project is to test any well which might attract tourists.

A health department sanitarian first inspects the well to see if its construction is proof against surface water or other pollution. He then takes a sample of water for a laboratory test. If the well is found safe the 8 by 10 inch sign is posted: "This Water Safe for Drinking . . . Michigan Department of Health."

Resorts, hotels, children's camps, tourist camps and other recreational centers bidding for the tourist trade are being inspected.

In co-operation with the State Stream Control Commission, bathing beaches are inspected and where there is danger of pollution, laboratory tests are made. If the degree of pollution is a health menace, a warning sign is posted on the beach.

NEWS OF PERSONNEL

On May 1, E. J. Brenner, M.D., returned as director of the Alger-Schoolcraft Health Department. Dr. Brenner was director of this department from 1937 until his entry into the Army in 1942. From 1930-36 he served as secretary of the Northern Michigan Medical Society.

* * *

Robert G. Wetterstroem, M.D., was appointed director of the Iron-Ontonagon District Health Department effective May 16, 1946. Dr. Wetterstroem received his M.D. from the College of Medicine, University of Cincinnati. He was on active duty with the U. S. Public Health Service from July 1, 1941, until his acceptance of this position.

* * *

C. Dale Barrett, Jr., M.D., was appointed director of the Ottawa County Health Department effective May 13, 1946. Dr. Barrett, who received his M.D. from the Wayne University College of Medicine, has just returned from service with the Army Medical Corps. He is the son of Dr. C. D. Barrett, director of the Ingham County Health Department.

* * *

On June 1, George A. Hays, M.D., returned to Flint as city health officer. Dr. Hays held this position from 1937 until he entered military service in 1942.

INCIDENCE OF COMMUNICABLE DISEASE

Disease	*May, 1946*	*May, 1945*	*7-year median*
Diphtheria	27	32	14
Gonorrhea	1,085	1,070	761
Lobar Pneumonia	93	74	210
Measles	5,134	1,296	3,355
Meningococcic Meningitis	21	19	8
Pertussis	607	277	915
Poliomyelitis	1	0	0
Scarlet fever	755	1,270	1,270
Smallpox	0	0	2
Syphilis	1,478	1,526	1,276
Tuberculosis	450	448	514
Typhoid fever	4	5	4
Undulant fever	15	29	11

VITAL STATISTICS—FIRST QUARTER 1946

Births in Michigan for the first three months of 1946 decreased 1 per cent and deaths increased 5 per cent from the same period of 1945.

Each of the four leading causes of death increased its toll over the first three months of 1945 and was above the five-year average.

Deaths from motor vehicle accidents jumped 70 per cent over 1945.

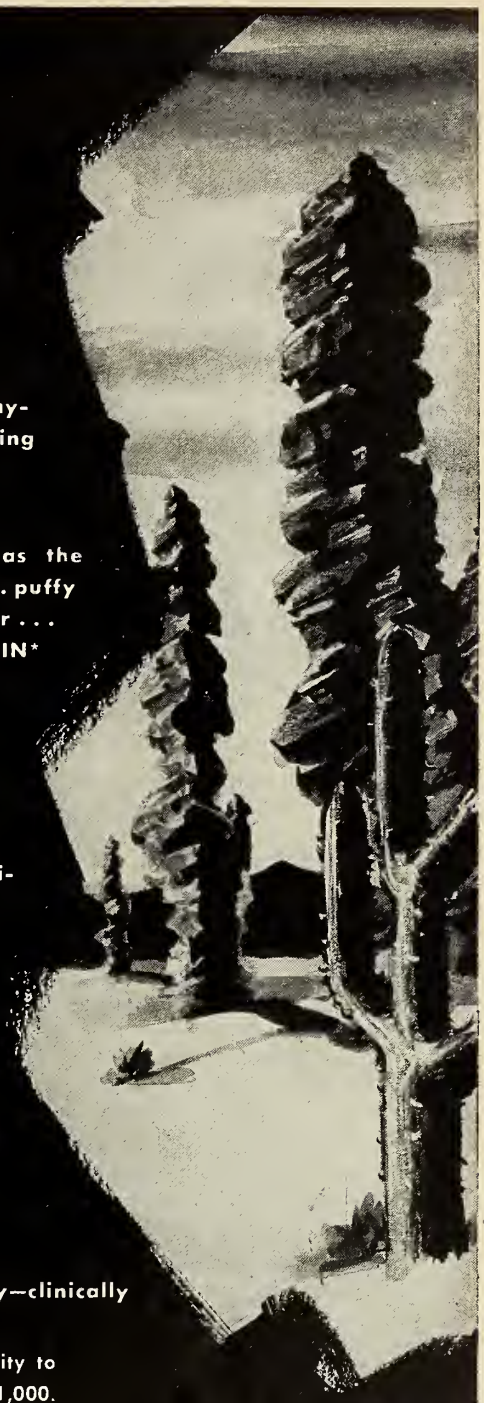
	First Quarter		
	1946	1945	Five-Year Average
Births	25,263	25,631	26,478
Deaths	14,179	13,519	14,254
Infant deaths (under 1 year)	955	1,081	1,176
Maternal deaths (140-150)	40	39	60
TEN LEADING CAUSES OF DEATH DURING THE QUARTER			
Heart disease (90-95)	4,727	4,396	4,497
Cancer (45-55)	1,736	1,687	1,637
Apoplexy (83.1, 83.2)	1,353	1,273	1,289
Accidents (169-195)	828	759	817
Motor vehicle traffic (170)	385	226	298
Other accidents	443	533	519
Inflammation of kidney (130-132)	669	678	735
Pneumonia (107-109)	653	639	870
Tuberculosis (13-22)	458	416	463
Diabetes (61)	430	372	398
Premature births (159)	303	297	329
Hardening of arteries (97)	247	283	276
CERTAIN COMMUNICABLE DISEASE DEATHS			
Diphtheria (10)	13	15	6
Infantile paralysis (36)	1	1	1
Influenza (33)	155	63	184
Measles (35)	28	2	15
Meningitis (epidemic) (6)	14	15	20
Scarlet fever (8)	1	3	8
Typhoid fever (1)	3	....	1
Whooping Cough (9)	8	11	16

Figures in parentheses indicate International List numbers, 1939 revision.

Little Joe Genius says—

I see where Dr. Mountain of the U. S. Public Health Service complains that heart disease, cancer, and diabetes are on the increase, and the reason given is that more people live to be sixty-five. What a black mark against the present day system of medical care!

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Woman's Auxiliary

BAY COUNTY

The April meeting of the Bay County Auxiliary was held in the doctors' staff room at General Hospital. Dessert was served to the twenty-one members present. The table was centered with an Easter egg tree fashioned from a barberry bush, decorated with colored eggs, with pastel-colored egg vases holding small spring flowers on either side.

Mrs. H. L. Woodburne reviewed the book "Outside Eden" by Isabelle Rorick. Mrs. A. L. Ziliak, Mrs. E. S. Huckins and Mrs. Harold Heuser were hostesses for the evening.

The final meeting of the year was held at the home of Mrs. P. R. Urmstron in May. Dessert was served by the hostesses, Mrs. R. E. Scrafford, Mrs. E. C. Miller and Mrs. C. W. Reuter. The regular business meeting followed, and the following new officers were installed: Mrs. Walter S. Stinson, president; Mrs. J. Norris Asline, president-elect; Mrs. C. W. Reuter, vice president; Mrs. F. J. Chapin, secretary; and Mrs. Roy C. Perkins, treasurer. Mrs. C. L. Hess acted as installing officer. The Nominating Committee was Mrs. A. L. Ziliak, chairman, Mrs. E. S. Huckins and Mrs. J. Howard McEwan.

Bridge was enjoyed by the twenty-eight members present.—Mrs. J. H. McEwan, *Press Chairman*

KENT COUNTY

Regular meetings have been held this year. Early in the year William Jakad discussed the juvenile delinquency problems in Kent County.

In January Dr. Samuel Hartwell of the Grand Valley Children's Center was guest speaker. Dr. William De Kleine, State Health Commissioner and former National Medical Director for the Red Cross, addressed the Woman's Auxiliary in February. For the March meeting, Dr. A. J. Baker spoke on "Political Medicine." Dr. Ralph Blocksma discussed the "panel system" in England as he observed it.

The annual spring tea was held at the home of Mrs. J. Winslow Holcomb. Dr. Robert J. McCandliss sang "In the Silent Night," "Ich Liebe Dich," "Love Is the Wind," and "Uncle Rome." Mrs. McCandliss, in her talk on "China—Past and Present," gave an historical background on China's disunity and a hope for a united China.

Presiding at the tea urns were Mrs. Willis L. Dixon and Mrs. Merrill Wells. Mrs. David B. Davis, decorations chairman, used white tapers centered with a bouquet of white flowers on the "tea" table.

The Auxiliary concluded its activities for the current season with an annual luncheon which was held in the Browning Hotel.

Mrs. Thomas C. Irwin, chairman, was assisted by Mrs. Floyd F. Gibbs as co-chairman. Spring flowers were used to decorate the tables.

Dr. Bernard J. Mulder was introduced by Mrs. Harry Lieffers, chairman of the program committee, and spoke of "Waiters on Tables."

Mrs. Garrett E. Winter was in charge of reservations.

Guests of honor were Dr. William J. Butler, president of the Kent County Medical Society, and Mrs. Horace L. French, past president of the Woman's Auxiliary to the Michigan State Medical Society.—Marguerite B. Kooistra, *Press Chairman.*

SAGINAW COUNTY

The October meeting was held at the Saginaw Tennis Club. Following the luncheon, Mrs. Lohr reviewed the novel, "Latchstring Out," by Skulda V. Baner. In November, Mrs. E. D. MacKinnon discussed "Ceramics" and exhibited some of her work for the County Medical Society Auxiliary at the home of Mrs. William B. Kerr. Mrs. James H. Curts and Mrs. F. E. Luger assisted the hostess.

A May Day motif was used at the County Medical Society Auxiliary benefit bridge at the new Weadock Nurses Home at St. Mary's Hospital. Spring and summer fashions were modeled by Mrs. James W. MacMeekin, Mrs. Gerald L. Ackerman, Mrs. Louis D. Goman, Mrs. Frank J. Gugino, Mrs. A. P. Murphy, Mrs. George W. Stewart, Mrs. James H. Curts, Mrs. Oliver W. Lohr, Mrs. Ralph S. Jiroch and Mrs. Arthur E. Leitch.

Mrs. Gunther E. Tiedke directed the arrangements. Proceeds from the party will be given to the Home.

Plans to conduct a year-around educational program for the Saginaw unit of the Field Army of the American Cancer Society were made by the Saginaw County Auxiliary at the meeting held at the home of Dr. Madelene M. Donnelly. The program will deal with teaching the public that by early diagnosis of cancer, it can be cured with radium, surgery or x-ray.

Mrs. Frederick Pietz, chairman for the tuberculosis speech project, presented a cash award to Mary Maziany, ninth grade Weber student, who won first place in the state tuberculosis speech contest sponsored by the Michigan Medical Society Auxiliary and the Michigan Tuberculosis Association. Her teacher, Miss Margaret Hunter, was a guest.

Dr. Donnelly reviewed "Dolls and Puppets" by Max Boehn, and exhibited her fine collection of dolls, which has been nationally recognized.

An attractive arrangement of white flowers centered the refreshment table. Mrs. A. Carl Stander, Mrs. R. O. Northway and Mrs. D. V. Sargent assisted the hostess.

—Bertha F. Ely, *Publicity Chairman*



PROOF

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Infron Pediatric is economical—one package contains six monthly administrations, each in an easily opened capsule container.

REFERENCES

1. Wolf, I. J.: Prevention of Rickets With Single Massive Doses of Vitamin D, J. Ped. Vol. 22, No. 4 (April) 1943.
2. Rambar, A. C.; Hardy, L. M. and Fishbein, W. I.: Hematologic and Radiologic Study of Infants Receiving Massive Doses of Vitamin D in Rickets Prophylaxis, Jl. Ped. Vol. 23, No. 1 (July) 1943.

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Correspondence

Dear Dr. Haughey:

Several months ago, Dr. William Cadbury left San Francisco for Lingnan University in Canton, China, to continue his medical missionary work and to teach medicine to his students. He wanted to return to his life's work in Canton, where he treated his first patient in 1909. Later, he helped to establish the medical school of Lingnan University.

Dr. Cadbury arrived in Canton recently and found the University's hospital filled with destitute patients, and the medical school's library entirely without books. He was in a Japanese concentration camp in 1942 when he was informed that the Japanese sold his medical books for fuel.

Many friends have given all the medicine the University hospital required for one year. Unfortunately, we are unable to replenish the medical school's library to a very large degree.

It is my sincere hope that you will come to the rally of a fellow colleague by sending him a gratis subscription of your reliable JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. Through your contribution Dr. Chadbury will be able to teach with one of the fundamental instruments of medicine-up-to-date journals.

Dr. Cadbury will rejoice to learn that the medical profession is still co-operative, efficient, and ever ready with a helping hand when the occasion arises.

The good doctor's address is—Dr. William Cadbury, Lingnan University, School of Medicine, Canton, China. Thanking you, and may I hear from you soon?

Respectfully yours,
1ST LT. GEORGE D. FUNG, M.C.

Section 4
Madigan General Hospital
Fort Lewis, Washington

We are sure any donations of good books would be gratefully received. We have given a three-year subscription.—Editor.

Dear Dr. Haughey:

In the April, 1946, JOURNAL, I read with interest the page "What Do We Learn From New Zealand." I thought you might be interested in some of the observations I made while in that country. I must confess immediately that I was not only not impressed with my observations, but I was sure at that time that the entire system would not be acceptable to the American people. The cost was to my way of thinking, excessive. The type of care given was also below our standards. But the attitude of the doctors was so contrary to our own, I was so sure of its non-acceptance by our people that I lost interest.

The social security tax of New Zealanders is one half crown out of each pound earned. (The pound has twenty shillings and the crown has five.) To me this seemed

(Continued on Page 796)

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(Continued from Page 974)

just a bit too much. Of course other benefits were covered by that tax, but the cost of medical care was a large item.

The attitude of the doctors toward their patients was quite in contrast to that as displayed here. They were as busy as were the doctors here. Yet they seemed to treat their patients as though they were conferring a favor upon them when they rendered service. Dr. Meyer Tietlebaum of Detroit and myself met a fellow there and were frequent guests at his home. One night he was complaining of his troubles, and both Meyer and myself felt that he was showing some evidence of a coronary occlusion. Meyer called his physician, explained the case to him and tried to get an appointment. At first the doctor said three weeks, and after a little urging on Meyer's part, decided to see the patient in ten days. Another time a patient had a condition that strongly simulated an acute appendicitis. The best that doctor could do was two weeks.

The quality of the work was definitely of an inferior brand. Two very commonplace items emphasized the people's attitude toward the medical profession. The first is that when people become ill, they first seek aid from the chemist (druggist). I have heard one girl, who formerly worked for a doctor, advise her friend to see a certain chemist. When asked why she did this, she replied that it was very difficult to see doctors, and also the doctors were not interested in minor ailments. Also, the chemists were often better in this work. The second was the extreme efforts that the New Zealanders used in order to see an American doctor.

In one instance, a New Zealand physician prescribed some certain drug, and then told the patient he would have to get it from the Americans, as New Zealand did not have it.

The idea of being of service to your patient is not evident there. They see the doctor when it suits his convenience. The Saturday that I visited with a New Zealand doctor was spent at a tennis club. He informed me that his patients saw him when he wished. No work on Saturday afternoon, or all day Sunday. Also he had surgery (office) hours on only specified hours. He was not interested in emergencies.

The worst feature that I saw was the doctors' political interference with the running of the country. They are the most autocratic group possible. The doctors control the medical affairs from beginning to end. You cannot practice unless they so desire. You cannot even study medicine unless they approve. When I was there, they denied a number of students from entering the study of medicine, because the number of applicants would then increase the number of practitioners. This created a storm, but a useless storm, as the physicians were so powerful that they prevailed.

The health statistics are very excellent, but when you analyze them, you find that they are rigged. They never include the incidence of ill health among the Moaris. These are the native people and can be somewhat compared to our negro population, in the nature of health.

With these observations, I am certain that the quality of medical practice here will follow the same trend as it has in New Zealand. Once I knew of an attempt to scare our members with a threat to force upon us the New Zealand system. Now such an attitude would only make me smile.

Very sincerely yours,
ROBERT J. DOUGLAS

Muskegon, Michigan
May 13, 1946

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Gogebic County.....Wm. H. Wacek, M.D., Sec'y.
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Menominee County....Wm. S. Jones, M.D., Sec'y.
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Northern Michigan....G. B. Saltonstall, M.D., Sec'y.
Ontonagon County.....W. F. Strong, M.D., Sec'y.
Sanilac County.....E. W. Blanchard, M.D., Sec'y.

Medical service plans are now organized in thirty-three of the forty-eight states and in process of organization in another eight states.

* * *

Douglas Donald, M.D., Detroit, addressed the Muskegon County Medical Society on "Agranulocytic Angina" on June 21 at the Occidental Hotel, Muskegon.

* * *

Ralph L. Fisher, M.D., and Morris Dukerman, M.D., Detroit, are authors of an original article, "Coronary Thrombosis," which appeared in JAMA, issue of June 1, 1946.

* * *

James Fyvie, M.D., of Manistique, recently released from the United States Army, has been honored by the French government with a *Croix de Guerre* citation. Congratulations, Dr. Fyvie!

* * *

Harold F. Falls, M.D., and Harry N. Jurow, M.D., of Ann Arbor are authors of an original article "Antepartum Vitamin K for Retinal Hemorrhage" which appeared in JAMA of May 18, 1946.

(Continued on Page 980)



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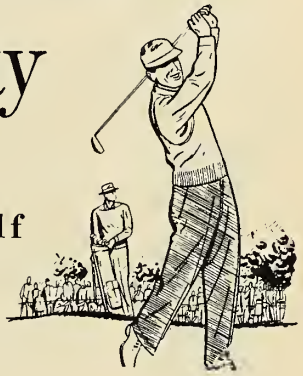


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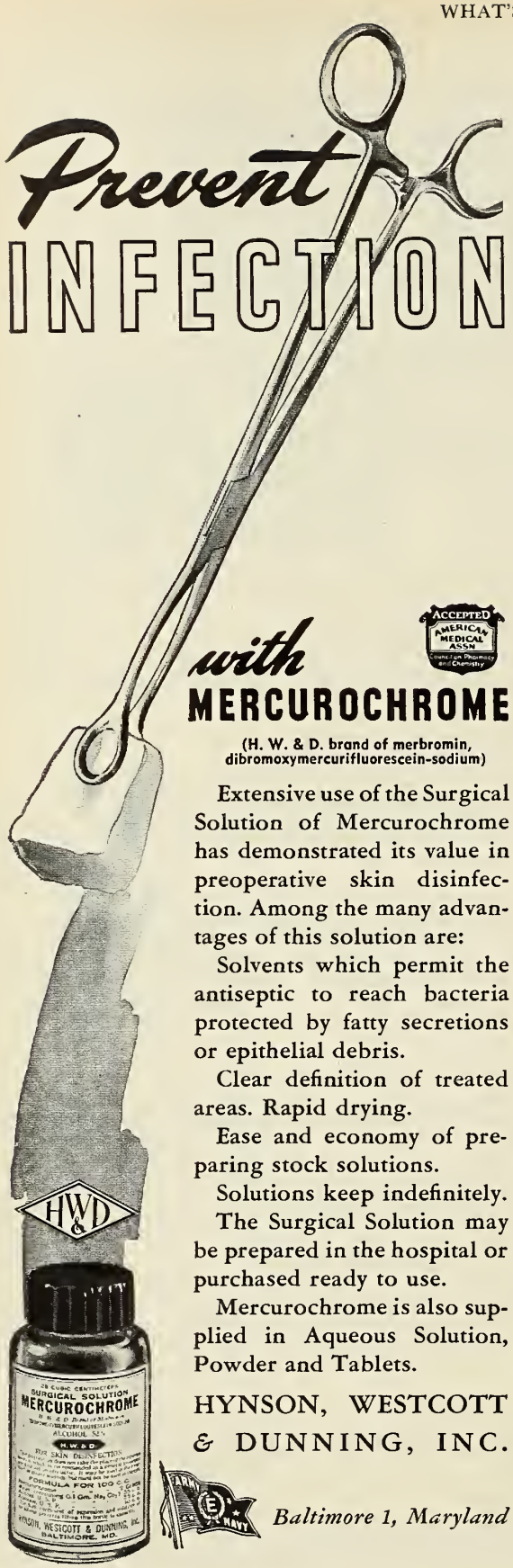
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(Continued from Page 978)

Thomas Francis, Jr., M.D., Jonas Salk, M.D., and Wm. M. Brace, M.D., of Ann Arbor, are authors of an original article, "Vaccination Against Epidemic Influenza B," which appeared in JAMA of May 25.

* * *

J. S. DeTar, M.D., Milan, Chairman of the MSMS Public Relations Committee, addressed the Rotary Club of Otsego, Michigan, on June 26. His subject was "The Evils of Socialized Medicine."

* * *

Wilfrid Haughey, M.D., Battle Creek, addressed the Woman's Auxiliary of the Calhoun County Medical Society on June 5. His subject was "The Wagner-Murray-Dingell Bill." Dr. Haughey also addressed the Branch County Medical Society on May 14, on the same subject.

* * *

R. J. Hutchinson, M.D., of Grand Rapids, celebrated his 50th Anniversary in the practice of medicine on May 15. The Grand Rapids Herald eulogized Doctor Hutchinson, and stated, "Dr. Hutchinson is an institution in Grand Rapids, and the community sincerely congratulates him on his long-time service to humanity."

* * *

A class for expectant mothers is held under the sponsorship of the Wayne County Medical Society and the Detroit Board of Health on Thursdays at 2:00 p.m. in the David Whitney House, the Society's Headquarters. The only requirement to join the group is referral by the applicant's doctor.

* * *

H. A. Tressel, M.D., was honored by the Wakefield Rotary Club with a testimonial dinner on May 18 for his thirty-three years of service to the community. In addition, an open house was held at the Tressel residence with an invitation to all who desired to "take part in paying respects to Dr. and Mrs. Tressel."

* * *

James D. Bruce, M.D., of Ann Arbor, has donated $10,000 to the American College of Physicians, half to be used for a memorial to Dr. Alfred Stengel, Past President of the College of Physicians, and the remainder to establish a lectureship on preventive medicine. Dr. Bruce is a former President of the American College of Physicians.

* * *

The Role of Hormones in Sterility is the subject of the 1946 Schering Award, a competition open to undergraduate medical students. For the best thesis submitted on this subject, the Schering Corporation of Bloomfield, New Jersey will give an award of $500; for the second and third best papers, awards of $300 and $200, respectively, will be granted.

* * *

On April 1 Dr. Olin West retired as secretary and general manager of the American Medical Association, after almost a quarter of a century's service in that position. He is succeeded by George F. Lull, M.D.

Dr. West joined the American Medical Association's official family as field secretary in 1922, coming from

(Continued on Page 982)

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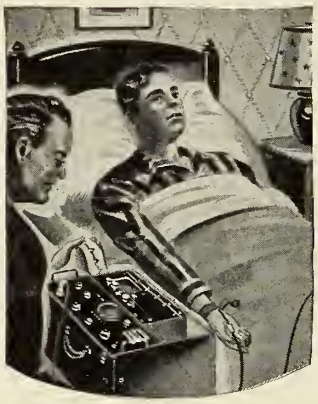
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(Continued from Page 980)

Tennessee, where he was secretary of the State Boa of Health. Soon afterward he was made secretary the A.M.A., and in 1924 he became general manager als

* * *

"Encore Theater" is the title of the new radio seri dedicated to the medical profession by Schenley Labor tories, which opened over CBS June 4. This half-ho program is aimed to develop wider public understandi and appreciation of the contribution made by the med cal profession and by medical research to the world health and welfare. C. E. Dutchess, M.D., formerly Detroit, is Medical Director of Schenley Laboratorie New York.

* * *

Ward L. Chadwick, M.D., of Grand Rapids, has be appointed by the American Academy of Pediatrics serve in Denver, Colorado, as temporary Regional Dire tor of the study of Child Health Services. Purpose the study is to gather nation-wide data on child heal facilities in local communities. Postwar planning w be based on this report. Dr. Chadwick will return private practice in Grand Rapids after the survey completed in two or three months.

* * *

Medical Vets request Autos. One hundred Detro doctors who have been discharged from the armed ser ices have been forced to rely on public transportatic for professional calls because they have been unable buy automobiles, according to the Wayne County Med cal Society which adopted a resolution May 23 urgi the Presidents of automobile companies to give their ir mediate personal attention to the problem and earma certain cars for the medical veterans.

* * *

The Medical Supply Corporation of Detroit has r cently expanded its service facilities by more than do bling present floor space. The adjacent building has be renovated and remodeled to merge with the present l cation at Woodward and Eliot to form one of the mo modern and well-equipped surgical and medical supp centers in Michigan. F. A. Janusch, President, a P. T. Sawyer, Treasurer, are to be commended on th progressive step marking the firm's twenty-first year business.

* * *

A. V. Avery, M.D., of Albion, was honored by h community at the conclusion of fifty-five years in tl practice of medicine, on May 12. Quoting from tl *Battle Creek Enquirer-News*—"When Dr. Avery beg practicing medicine, he called on his patients by hor and buggy. He maintained a stable of two or thr horses at all times to be prepared always for a rural ca With the advent of the automobile, he was the secon person in town to buy a car. One thing he missed, ho ever, in motor travel; he couldn't tie the reins arou the whip standard and go to sleep after a busy nigh confident the vehicle would take him back to his ow garage as Dobbin always did."

(Continued on Page 984)

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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

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(Continued from Page 982)

The MSMS Committee on Industrial Health sponsored the first Regional Industrial Health Conference in Bay City on June 5. The following program was held:

5:15 p.m. Tour of Chevrolet plant.

6:30 p.m. Pre-prandial hour and dinner at Wenonah Hotel.

8:00 p.m. Program, with motion pictures, at Wenonah Hotel.

The physicians of the Bay County area were dinner guests of the General Motors Corporation. Four other Regional Industrial Conferences, similar to the Bay City meeting, are being arranged by the MSMS Industrial Health Committee, for Flint, Grand Rapids, Lansing, Pontiac and Saginaw.

* * *

Baby cereal of a century ago was simply stale bread lightly boiled in water, wine or beer. Butter or sugar might be added but the use of milk was regarded as fraught with danger—milk might bring on the watery gripes, or the infant might imbibe with the milk the evil passions and frisky habits of the animal supplying the milk!

The Collection of Pediatric Antiques, now on an annual pilgrimage to colleges, hospitals, museums, libraries and other institutions of learning, is of considerable historical importance, depicting the progression of infants' feeding vessels and habits from the Greece of twenty-five centuries ago down to time within our own memory. The collection has been developed by Mead Johnson & Company of Evansville, Indiana.

* * *

Michigan Speakers on the Scientific Program of the American Medical Association session held in San Francisco in July included: J. D. Adcock, M.D., Ann Arbor; C. C. Birkelo, M.D., Detroit; Malcolm Block, M.D., Ann Arbor; F. A. Coller, M.D., Ann Arbor; J. W. Conn, M.D., Ann Arbor; A. C. Curtis, M.D., Ann Arbor; H. F. Falls, M.D., Ann Arbor; E. S. Gurdjian, M. D., Detroit; F. W. Hartman, M.D., Detroit; F. J. Hodges, M.D., Ann Arbor; J. F. Holt, M.D., Ann Arbor; D. H. Kaump, M.D., Detroit; R. M. Nesbit, M.D., Ann Arbor; J. K. Ormond, M.D., Detroit; H. M. Pollard, M.D., Ann Arbor; R. K. Ratliff, M.D., Ann Arbor; C. C. Sturgis, M.D., Ann Arbor; R. W. Waggoner, M.D., Ann Arbor; J. E. Webster, M.D., Detroit; and W. W. Zuelzer, M.D., Detroit.

* * *

Altmeyer Testimony on S. 1606 (April 4,1946):

Senator Donnell: Do you mind telling us, Mr. Altmeyer, who is the actual author of S. 1606, I mean to say who actually prepared it, if you know?

Mr. Altmeyer: I think it is a product of many minds that were put to work at the request of the authors of the bill.

Senator Donnell: Was Mr. Falk, Isadore Falk, one of the gentlemen who participated in it?

Mr. Altmeyer: Yes, sir, he is director of our bureau of research and statistics.

Senator Donnell: Did he do the bulk of the work in the preparation of S. 1606?

Mr. Altmeyer: I would not say he did the bulk of

(Continued on Page 986)

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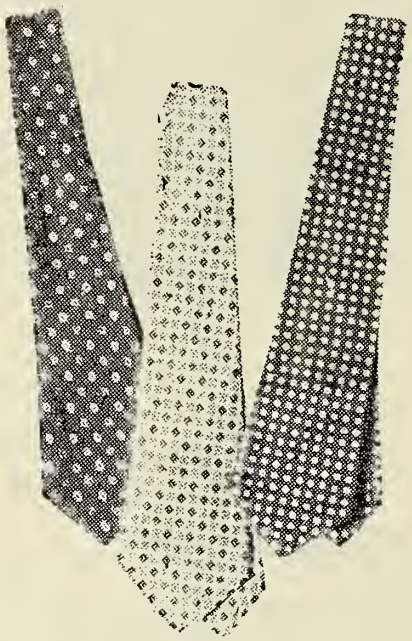
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(Continued from Page 984)

the work, he did a major or considerable part of it in co-operation with the United States Public Health Service.

* * *

A meeting of the Ninth Council or District and the eastern half of the Tenth Councilor District was held at Traverse City on May 29, under the co-chairmanship of Councilors E. F. Sladek, M.D., Traverse City, and F. H. Drummond, M.D., Kawkawlin.

MSMS President R. S. Morrish, M.D., of Flint, spoke on "Medical Economics."

MSMS Secretary L. Fernald Foster, M.D., of Bay City, discussed "Medical Public Relations."

L. Gordon Goodrich, Detroit, Assistant Director of Michigan Medical Service, outlined "The Veterans Administration Home Town Medical Care Program in Michigan."

Carleton Dean, M.D., Lansing, Director of the Michigan Crippled Children Commission, explained "The Rheumatic Fever Control Program of Michigan."

Wm. J. Burns, Lansing, MSMS Executive Secretary, presented the "Fourteen Firsts of the Michigan Medical Profession."

Sixty members in the two Councilor Districts were present, including Past President C. R. Keyport, M.D., of Grayling and MSMS Public Relations Counsel H. W. Brenneman.

* * *

Internationally known speaker at College of Surgeons Assembly in Detroit: Mr. Hamilton Bailey of London, England, will visit Detroit in October to deliver an address at the Eleventh Assembly of the United States Chapter, International College of Surgeons. His subject will be "Impending Death Under Anesthesia."

Among the eminent speakers and clinicians who will appear at the I.C. of S. clinics, and the Assembly to be held in Detroit's Masonic Temple, October 21-22-23, the following are noted: Dr. Albert Jirasek of Prague; Dr. Francisco Grana of Lima, Peru; Dr. Felipe Carranza of Buenos Aires; Dr. W. Wayne Babcock of Philadelphia; Dr. Wm. G. McCarthy, Jr., and Stuart W. Harrington, Rochester, Minn.; Dr. R. W. McNealy, Chicago; Dr. Richard Overholt, Boston; Dr. Edwin L. Zander, New Orleans; Dr. Albert A. Berg and Dr. Rudolph Nissen of New York; Dr. Max Thorek, Chicago; Dr. H. E. Billig, Los Angeles, and others.

Copy of program and detailed information, including housing arrangements, may be obtained by writing Dr. L. J. Gariepy, Secretary, 16401 Grand River Avenue, Detroit 27, Michigan.

* * *

The Michigan Pathological Society will meet in Detroit on the occasion of the Annual Session of the Michigan State Medical Society.

The pathologists have arranged a program for Thursday, September 26, at the Statler Hotel, beginning at 3:00 p.m. and ending at 11:00 p.m. An informal seminar on "Diseases of the Breast" will be led by C. F. Geschickter, M.D., of Baltimore.

(Continued on Page 988)



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(Continued from Page 986)

Dinner will be served at the Statler at 6:30 p.m. and the pathologists will have their final meeting at 7:30 p.m. at the Hotel.

A. L. Amolsch, M.D., of Detroit, is President; S. E. Gould, M.D., of Eloise, is President-Elect; and D. H. Kaump, M.D., of Detroit, is Secretary-Treasurer of the Michigan Pathological Society.

All MSMS members are invited to attend the sessions of the Michigan Pathological Society.

* * *

The News Letter of the AMA Council on Medical Service and Public Relations contained this interesting paragraph, describing the hearings on the Wagner-Murray-Dingell Bill in Washington:

"The Chairman of the National Commission on Children and Youth testified for the bill. Sounds like a big nation-wide group. But here is what questioning brought out: The Commission consists of a group of people appointed by Miss Lenroot and Dr. Martha M. Eliot of the U. S. Children's Bureau.

"Your patients should know about these tie-ups."

It is interesting to note that the Michigan State Medical Society had a difficult time sending its representatives to appear at the Washington hearing on S. 1606—Senator Murray claiming that the hearings were limited to "national groups."

It is further interesting to note that, following Michigan's representatives at the hearing, a lone doctor of medicine from Bad Axe, Michigan, who represented no national group, was invited to testify in behalf of the bill by Chairman Murray who previously had ruled that only "national groups" could be heard!

* * *

Doctors of medicine throughout Michigan are urged to interest young women of their own families and of their patients' families in investigating nursing as a career.

The need for nurses continues to be critical according to Miss Kathleen Young, R.N., President of the Michigan State Nurses Association.

"At least 1,000 girls must enroll in our schools of nursing this September if the minimum requirements for nursing care are to be met," she said.

She pointed out that many young women eligible to become student nurses do not know that nurses' salaries have been increased during the past few years and that opportunities for advancement and specialization in the nursing field are almost unlimited.

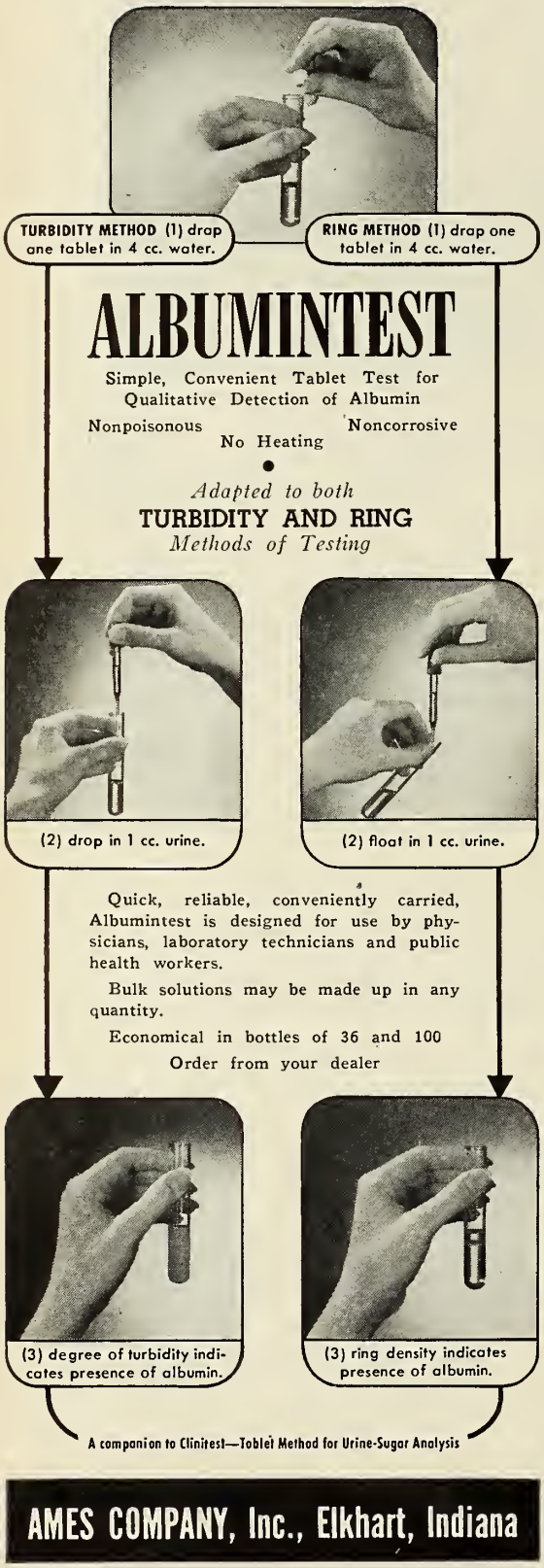
Information regarding the schools of nursing in the state is available from the Michigan Council on Community Nursing, 51 West Warren, Detroit 1.

* * *

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(Continued on Page 990)



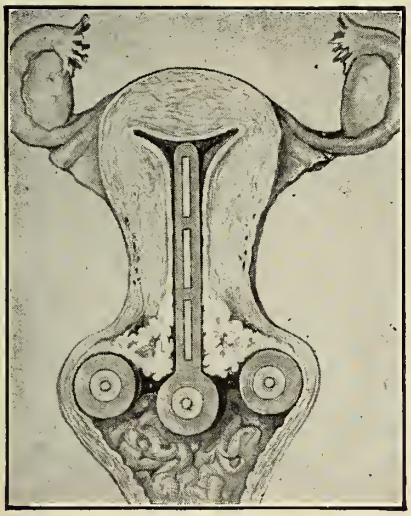


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(Continued from Page 988)

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Thursday, July 25

Medical, Surgical, Orthopedic, Genito-urinary clinics
Plus formal papers and discussions by Dr. Frederick Coller and associates
Evening: Banquet at the Traverse City Country Club

Friday, July 26

Surgical operative clinics
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* * *

NARCOTIC LAW DEFINED

It shall be unlawful for anyone to sell narcotic drugs except pursuant to a written order on a form furnished in blank for that purpose by the Commissioner of Internal Revenue. To this general prohibition there are certain exceptions: one being that a duly registered physician, dentist, or veterinary surgeon may administer or dispense narcotic drugs in the course of his professional practice and for legitimate medical needs. Another exception is that a pharmacist may sell narcotic drugs to a consumer under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon registered under the Federal narcotic law for legitimate medical needs, provided that such prescription SHALL BE DATED AS OF THE DAY ON WHICH SIGNED. A VALID PRESCRIPTION ALSO MUST BE WRITTEN IN INK, OR INDELIBLE PENCIL, MUST SHOW THE PATIENT'S NAME AND ADDRESS AND THE NAME, ADDRESS AND REGISTRY NUMBER OF THE PRACTITIONER. NOWHERE DOES THE LAW PROVIDE FOR THE SALE OF NARCOTIC DRUGS BY A PHARMACIST PURSUANT TO AN ORDER TELEPHONED BY A PHYSICIAN.

When a physician telephones a druggist and says: "Send twenty quarter-grain morphine sulphate tablets to Mrs. Smith and I'll give you a prescription later," the physician is asking the pharmacist to violate the law. The pharmacist may not lawfully comply with the physician's request. If a pharmacist persists in filling such telephone requests, he may find himself charged with a violation of the Federal narcotic law. THE PHYSICIAN MIGHT ALSO FIND HIMSELF CHARGED WITH AIDING AND ABETTING SUCH VIOLATION. The Bureau of Narcotics has recognized, however, that there may be instances of extreme emergency when, in order to expedite the delivery of such narcotics, the physician may wish to telephone the prescription in order that it may be ready when called for or may wish to have the drugs delivered to the patient. But even in these instances, THE PRESCRIPTION MUST BE HANDED TO THE DRUGGIST OR HIS MESSENGER AT THE TIME OF THE DELIVERY OF THE DRUGS.

—From *Detroit Medical News,* April 29, 1946.

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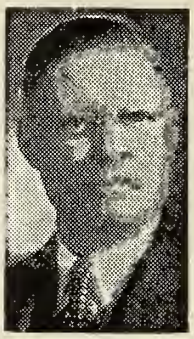
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CLINICAL ELECTROCARDIOGRAPHY. By David Scherf, M.D., F.A.C.P., Associate Professor of Medicine, New York Medical College, New York Flower and Fifth Avenue Hospitals, New York, and Linn J. Boyd, M.D., F.A.C.P., Professor of Medicine, New York Medical College, New York Flower and Fifth Avenue Hospitals, New York. New American Edition. 409 illustrations in 243 figures. Philadelphia: J. B. Lippincott Company, 1946. Price, $8.00.

This book is a completely revised and rewritten previous English edition on the practical use of electrocardiography met daily in the diagnosis of heart conditions. The essential features of electrocardiography are presented, interpretation of tracings is taken up in detail, abundant clinical and therapeutic material is introduced, and many controversial hypotheses are presented for their face values. All this coupled with ample and excellent illustrations, makes this book of marked value to both the inexperienced and the expert in the vital science of electrocardiography. The extensive bibliography at end of each chapter, the large type printing and ease of reading makes this publication a valuable addition to the library on this subject.

REHABILITATION, ITS PRINCIPLES AND PRACTICE. By John Eisele Davis, M.S., Sc.D., Veterans Administration Facility, Perry Point, Maryland. Revised and Enlarged Edition. New York: A. S. Barnes and Company, Inc., 1946. Price, $3.00.

This book is introduced by a study of the effects of war and depression. Tables are given of the numbers who engaged in war efforts in 1940, 1942 and 1943. Men and women are separated. Government employes increased from 4,300,000 in 1940 to 5,900,000 in 1943. The armed forces increased from 600,000 men in 1940 to 9,000,000 men and 300,000 women. War industry from 1,300,000 to 20,800,000. This upset the natural level and influenced the problem of rehabilitation. The psychiatric approach is studied, also the psychological approach. A chapter is given on the interest and effort theories of reconstruction. Nervous, mental and physical reconstruction is given prominency. Modern methods of practice with illustrative cases, and the use of handicrafts, education and art. The book is written for physicians, social workers, and the families of the mentally handicapped.

CLINICAL APPLICATION OF THE RORSCHACH TEST. By Ruth Bochner, M.A., Psychologist, formerly Bellevue Hospital Psychiatric Hospital, and Florence Halpern, M.A., Psychologist, Bellevue Psychiatric Hospital, New York. Second Edition, Revised and enlarged. New York: Grune & Stratton, 1945. Price, $4.00.

Most of the Rorschach literature up to the present time is to be found in a wide variety of professional journals. The integration and digestion of this material are now proceeding apace, and the trend is to render the results into such a concise and understandable form as to be useful to those interested in social and clinical dynamics. This book is one of the latest in the field of projective technics, and is to be considered a part of this integrative processing. In a specific sense, it consti-

(Continued on Page 994)



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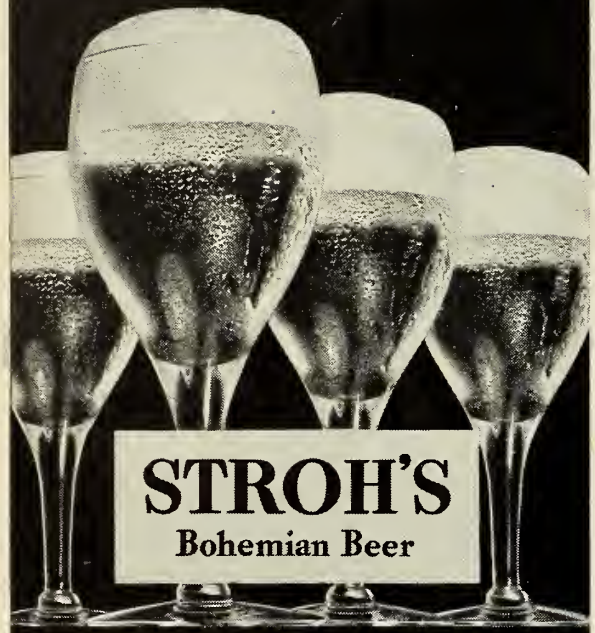
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(Continued from Page 992)

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(Continued from Page 994)

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A HISTORY OF MEDICINE. By Douglas Guthrie, M.D., F.R.C.S.Ed., F.R.S.E. With an introduction by Samuel C. Harvey, M.D., F.A.C.S., Wm. H. Carmalt, Professor of Surgery, Yale University School of Medicine. With 72 plates. Philadelphia: J. B. Lippincott Company, 1946. Price, $6.00.

A knowledge of the history of medicine is necessary to a well-rounded medical education. To understand the marvelous advances made in recent times and in our present time it is necessary to know the methods and long continued but slowly progressing development of our knowledge. The earliest known medical facts are given in this book, with historical acknowledgement to the Aurignacian medicine men pictured in caves 15,000 B.C., the trephining of the stone age, and bronze age. Imenhotep, the Ebers Papyrus, medical ethics of Babylonia, Aesculapius, Hippocratic Medicine, Roman and Byzantine advances are carefully given. The middle ages of medicine are fruitful of chapters and critical discussions of the times: the great plagues, Harvey and his times, and the Royal Touch. The last half of the book discusses the advancement in the eighteenth, nineteenth and twentieth centuries. The teaching of surgery, the development of schools, the great names such as Edward Jenner, Claude Bernard, Robert Knox, Richard Bright, et cetera, make most interesting reading. And the modern scientific medicine, with the development of specialties and preventive medicine are not forgotten. This book is largely from the European standpoint, but touches American contributions. It is authentic, well written, and readable.



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W. R. Torgerson, M.D., (1946), .. Grand Rapids
J. J. Walch, M.D., (1946), Escanaba

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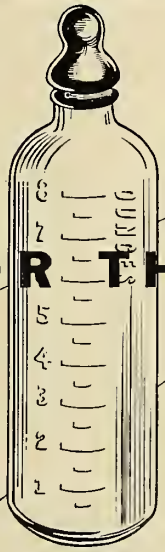
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LIBBY'S EVAPORATED MILK

FOR THE INFANT'S FORMULA

Fortification with 400 U.S.P. Units of vitamin D_3—7-dehydrocholesterol—per pint, assures adequate antirachitic protection when you specify Libby's Evaporated Milk for the infant's formula.

But it does more. The amount of vitamin D thus provided is sufficient for every metabolic purpose in which vitamin D is known to participate, such as calcium absorption and deposition, dentition, phosphorus metabolism, etc.

Libby's Evaporated Milk is processed where selected herds produce it, under meticulous controls, and sterilized. Homogenization breaks up the fat and distributes it homogeneously throughout, lessens curd size, softens the curd, and reduces curd tension to zero. The utmost in digestibility is thus assured.

The nutritional value of Libby's Evaporated Milk may be gained from this table:

Each can (13 fl. oz.) provides

Calories	569	Phosphorus	0.82 Gm.
Protein	28 Gm.	Vitamin A	1762 U.S.P. Units
Fat	32 Gm.	Thiamine	0.19 mg.
Lactose	40 Gm.	Riboflavin	1.46 mg.
Calcium	1.02 Gm.	Ascorbic Acid	5.06 mg.
		Vitamin D_3	325 U.S.P. Units

LIBBY, McNEILL & LIBBY
CHICAGO 9, ILLINOIS

Libby's
EVAPORATED MILK

ACCEPTED
AMERICAN MEDICAL ASSN.



MSMS COMMITTEE PERSONNEL

(Continued from Page 1004)

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*Deceased

RACKHAM SHOES

Foundation for Good Health

SPECIFY RACKHAM'S
for
BETTER FITTING ORTHOPEDIC SHOES

Stuart J. Rackham Company

Stuart J. Rackham, President — CORRECT SHOES FOR MEN AND WOMEN — Clyde K. Taylor, Manager

2040 Park Ave.—Opposite Women's City Club Detroit 26, Michigan

YOU WRITE THE *Prescription* WE FILL IT . . .

Whenever Dairy Products are indicated in the diet—remember Borden's—Distributors of Fluid Milk, Cream and other Dairy Products.

—if it's Borden's, it's got to be good!

BORDEN'S FARM PRODUCTS CO. OF MICHIGAN

3600 E. FOREST IN GREATER DETROIT—PLAZA 9000



Truly, this is America . . . the Doctors Meet

"That case of fibrillation was interesting."
"My diagnosis agreed with Tom's, but . . ."
"These new radio-active drugs have me puzzled."

SHOP TALK where it counts the most!

All over the nation, members of every profession follow the good American habit of getting together to talk things over. When business men meet, they analyze their common problems. When physicians meet their purpose is the same.

This free interchange of man's experience healing his fellow-man, this individual exploration into the vast field of medicine is an invaluable contribution to America. For America's progress is part and parcel of America's health. As in business or the arts, where independence begets initiative, so in Medicine the great advances come from the doctor's inner urge to improve, to discover, and to pass on to his colleagues everywhere the benefit of his findings.

IN THE typically American town of Summit, Ciba has gathered medical scientists whose one aim is the continual development of superior pharmaceuticals. Through their untiring efforts, physicians the world over are being provided with newer and finer means to safeguard health.



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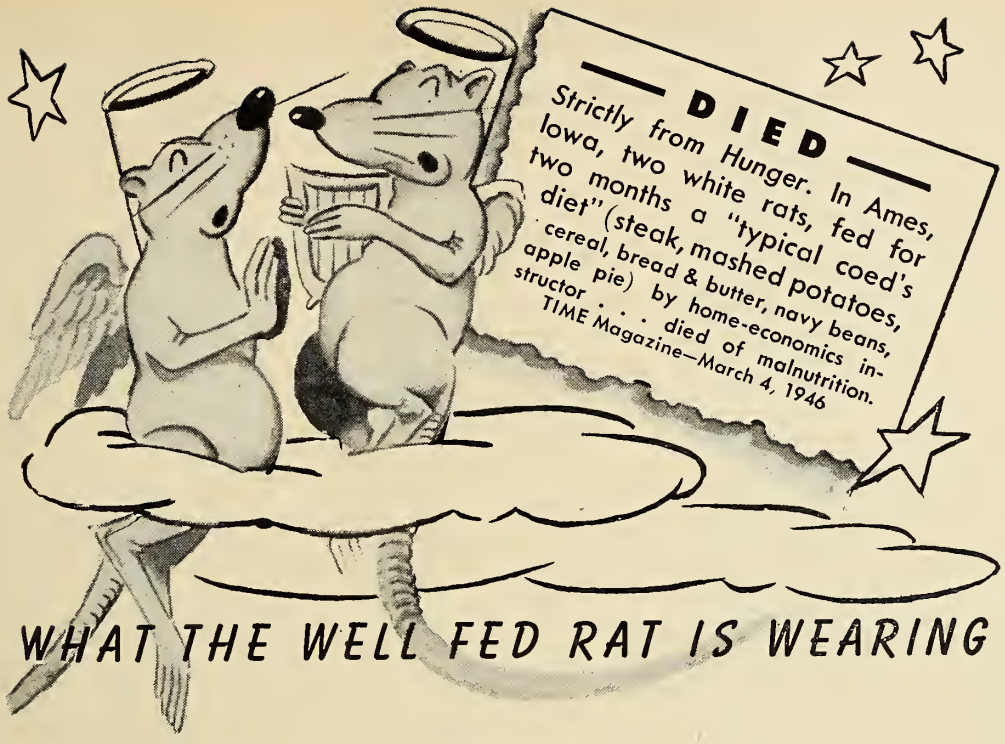
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Halos and wings—they're the latest things for these two little rats, who stuffed themselves for two months on "a typical co-ed's diet . . . and died of malnutrition."

Although science may take this conclusion with a grain of salt, certain it is that many of your patients do exist on a "typical co-ed diet."

With orange juice sky-high and going higher, few of them get anything like their optimal requirements of vitamin C. Yet for a fraction of the cost of orange juice,* Doctor, your patients can get vitamin C protection with SODASCORBATE (sodium ascorbate).

SODASCORBATE Tablets are not only much less expensive than orange juice, but offer distinct advantages to your patients who are unable to tolerate ordinary vitamin C. The only sodium ascorbate in dry, neutral form, SODASCORBATE permits full and frequent doses of vitamin C without the gastric irritation, acid-shift or other undesired after-effects that so often result from large doses of straight ascorbic acid.

The average dose for adults is one tablet t.i.d.; or as indicated by the condition. For children under 12, one-half tablet. For babies or very young children, ¼ to ½ tablet may be crushed and dissolved in milk.

Supplied in bottles of 40 and 100 tablets, as well as in "hospital-size" bottle of 500 tablets. Mail the coupon for professional samples and covering literature.

SODASCORBATE

*An 8-oz. glass of orange juice (75 to 100 mg. vitamin C) costs 12c to 17c prepared at home—20c to 40c at public counters. One SODASCORBATE Tablet (equal in vitamin C activity to 100 mg. of ascorbic acid) costs ¼th or 1/5th as much—or 3½c.

VAN PATTEN PHARMACEUTICAL CO.
500 North Dearborn Chicago 10, Ill., MSJ8

Please send the following:

☐ Professional sample of SODASCORBATE.
☐ Monograph, "New Horizons in Vitamin C Therapy."
☐ Physician's windshield emblem.

Dr. _____

Address _____

Town _____ State _____

PHYSICIAN

PHYSICIAN'S EMBLEM

DOCTOR: A new physician's emblem for the windshield of your new automobile. Yours free for the asking.

The Who-What-When-Where-Why of Medical Public Relations

Breaking the trail is hard work but it "pays off" in returns, immediate and in the future. As usual, just a little ahead of the pack, the Michigan State Medical Society started an augmented public relations program in January and is currently in the position of being consulted by other state societies on the Who, What, When, Where and Why of modern medical public relations.

It is gratifying to note that the AMA adopted a plan, at its recent annual session in San Francisco, to place its important and vast public relations efforts in the hands of a highly trained Public Relations Counsel. It is regrettable this was not inaugurated ten years previously.

The MSMS Public Relations program is well under way. Here are some of the indications:

1. Newspaper advertisements prepared by the MSMS and sponsored by county societies, individual doctors and interested businessmen are appearing in eighty of the major daily and weekly newspapers of the state. Seven in the series of twelve have appeared. Made up for a bi-weekly schedule, some societies have run them on consecutive weeks either repeating the ads or preparing additional ads with the help of local newspaper advertising managers.

2. The pamphlet program is off to a start with 200,000 copies of the first two of the "Little Joe Genius" pamphlet series already distributed, and pamphlet No. 3 is on the way. A total of 80,000 copies of the pamphlet "You Have a Choice" has been prepared in co-operation with the Michigan Health Council (their assistance in newspaper layouts has been invaluable) and are being distributed through doctors' offices. A big hand is due those doctors who have added weight to the pamphlet program by personally dispensing pamphlets in their office and to their friends and acquaintances.

3. The MSMS radio program "American Medicine" vacationed for the summer from its once a week schedule over the Michigan Radio Network and supplementary stations (fifteen stations in all). Coverage of the thirteen-week series was the widest obtained in Michigan by a single advertiser.

4. M.D.'s are currently congratulating the Woman's Auxiliary of many county societies and the state society for their most valuable assistance in distributing leaflets. The *Auxiliary News* carried material on the WMD bill and more than one lady is carrying the clipping about in her purse to refer to for ammunition when the opportunity arises.

5. The debate subject for high schools next year is "Resolved: That the Federal Government should provide a system of complete medical care available to all citizens at public expense." A great big bundle of material brought the thanks of Edith Thomas, chief extension librarian of the University of Michigan, who gathers the material from which the young debaters extract arguments and facts. She'll receive more too. The school debaters have a big, impressionable audience.

6. Covers for the speakers kits previously sent to the various members of the County Society Speakers' Bureaus have been mailed, and additional material will follow. Speakers who have represented their societies say that it's a thrill to talk on medical socio-economics because people are interested. Their efforts are exploding the myth that "the medical profession is divided on the question of government control."

The latest Gallup poll says that the average man likes the idea of medical insurance but is not definite on who should administer the program. John Q's choice may be determined later by a vote, but the direction of his nod will be *decided now* and *during the coming months.* The only wasted effort will be if its the usual "too little and too late."

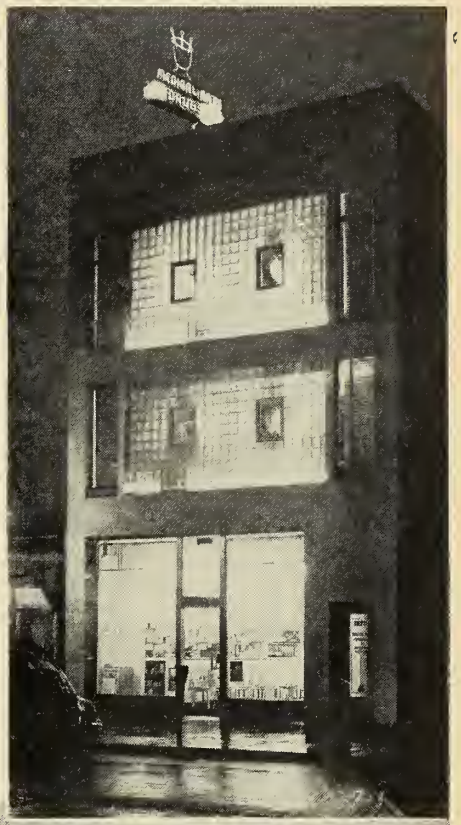
ANTIBIOTICS

The future of antibiotics is certain. What the new developments are to be is questionable, but the possibilities are great and almost endless. Fleming himself does not believe that penicillin will be the only clinically important antibiotic or even the best. We have two agents, penicillin and streptomycin, which will control infections by most of the gram-positive and gram-negative infections for which there was little or no treatment ten years ago. As yet, the problems of the virus infections and the walled-in chronic infections are to be solved.—D. F. Marsh, Department of Pharmacy, West Virginia University; West Virginia M. J., 42: (April) 1946.

The Most Modern Prescription Pharmacy in Michigan

THREE FLOORS OF PRESCRIPTION NEEDS AND PHYSICIAN'S SUPPLIES

Medical Arts Pharmacy represents the achievement, through the physician's co-operation, of one of the finest and most modern of professional prescription pharmacies in Michigan. Established in 1936 it has had a phenomenal growth through strict adherence to the highest of ethics. *"Nothing Sold Without a Doctor's Prescription"* has been the policy since the inception of Medical Arts Pharmacy and it continues to be rigidly maintained to this day.



SUMMER HOURS
8 A. M. to 12 Midnite
April 1 to December 1
Motorized Delivery Service

PRESCRIPTIONS

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PHYSICIAN AND HOSPITAL SUPPLIES

WE CARRY THE ETHICAL PHARMACEUTICALS AS

ADVERTISED IN TIME THE WEEKLY NEWSMAGAZINE



MEDICAL ARTS PHARMACY

Your Supplier of All New Drugs From All Over the World

Four Main Lines for Your Convenience

TOwnsend 8-3149-50-51-52

13714 WOODWARD AVENUE **DETROIT 3, MICHIGAN**

You and Your Business

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY EXAMINATIONS

The next written examination (Part I) of the American Board of Obstetrics and Gynecology, Inc., will be held for all candidates in various cities of the United States and Canada on Friday, February 7, 1947 at 2:00 p.m. Candidates who successfully complete the Part I examination proceed automatically to the Part II examination held later in the year. All applications must be in the office of the secretary by November 1, 1946. Candidates in military service are requested to keep the secretary's office closely informed of changes in address.

A number of changes in Board regulations and requirements were put into effect at the last annual meeting of the Board held in Chicago, Illinois, May 5-11, 1946. Among these is the requirement that case records must now be forwarded to the secretary's office from thirty to sixty days after the candidate has received notice of his eligibility for admission to the examinations for certification. At this meeting the Board also ruled that it will not accept the nine months residency as an academic year toward years of training requirements, following the termination of the official period of intern and residency acceleration, April 1, 1946.

Applications are now being received for the 1947 examinations. Final examinations will be held in Pittsburgh, Pa., June 1-7, 1947. For further information and application blanks address:

Paul Titus, M.D., Secretary,
1015 Highland Building,
Pittsburgh 6, Pennsylvania.

"HOME-TOWN" PHARMACEUTICAL SERVICE FOR VETS

Contracts for the care of veterans with service-connected disabilities, allowing free choice of physician, have been effected in Michigan, Kansas, California, Washington, Oregon, and New Jersey. Similar contracts have been made with hospitals and hospital service organizations for hospital care of veterans.

In addition, thirty-one state pharmaceutical associations have accepted the plan whereby veterans may have prescriptions filled by their own pharmacists.

The Michigan Pharmaceutical Association is one of the state groups which has entered into an agreement with the Veterans Administration for pharmaceutical service to eligible veterans.

"Designated" or "fee basis" physicians, after authorization by Veterans Administration to treat an eligible veteran, may prescribe as indicated, and such prescriptions may be filled, without cost to the veteran, at any participating pharmacy in Michigan. Physicians may use their regular prescription blanks for this purpose. Whenever possible, physicians should indicate the veteran's "fee number" on the face of such prescription. Prescriptions must be dated the day written and such date must be within the period of authorization for treatment of the particular Veterans Administration beneficiary, according to Paul R. Hawley, M.D., Chief Medical Director of the Veterans Administration in a communication dated July 24.

BILL M.C.C.C. WITHIN SIXTY DAYS

One of the requirements of the Crippled and Afflicted Children Acts is that billing be received by the Commission within sixty days of the time the child leaves the hospital.

Many physicians have been leaving the billing of their medical services to the hospital, often disregarding whether or not the hospital has followed through and has adequately provided for the physician's fee for service.

In some instances, hospitals have failed to bill either for themselves or for physicians, within the sixty day limitation. In other cases, hospitals have sent in bills for hospital's care without providing a bill for the physician's services. These omissions have frequently resulted in the loss of fees to the physician, the hospital, or both.

As the result of the above facts, it is recommended that each physician—at the time of his regular billing on the first of each month—make out a bill in duplicate for the services he has rendered to afflicted or crippled children—one to be sent to the Michigan Crippled Children Commission, 458 Hollister Bldg., Lansing, and the other to be forwarded to the hospital. Such a procedure will protect the doctor of medicine against loss of his fee and will insure that he has complied with the statutory requirements.

2,398 MICHIGAN DOCTORS OF MEDICINE IN WORLD WAR II

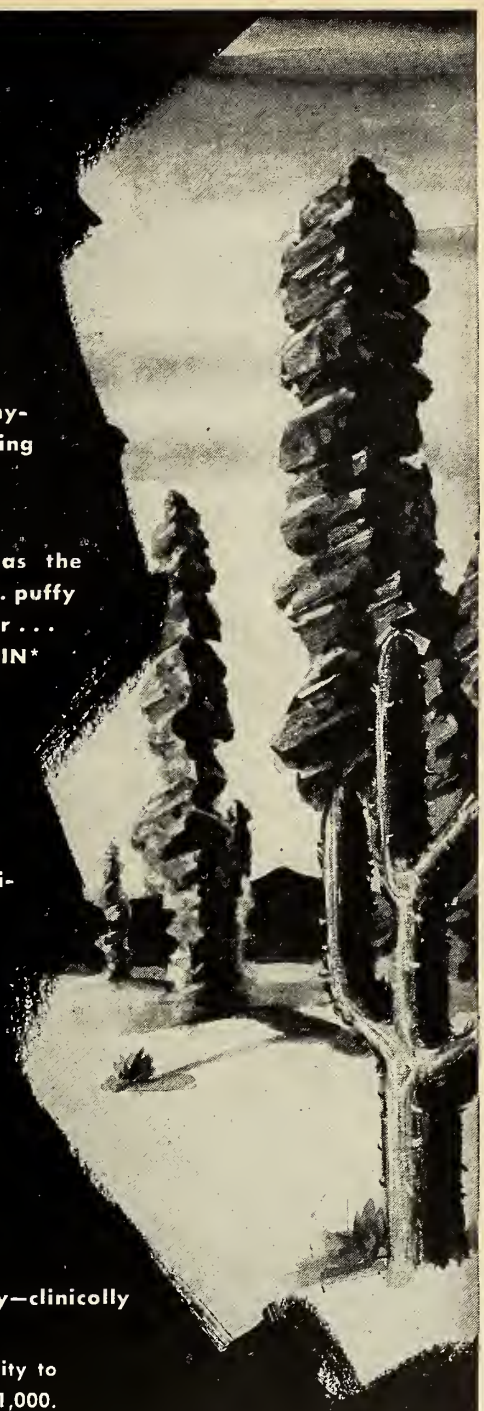
The Bureau of Information of the American Medical Association reports that 2,398 physicians were in military service from the State of Michigan. Of this total 1,443 physicians were separated from service, as of July 1, 1946, and are now located in Michigan.

Nine-hundred fifty-five (955) physicians from Michigan are now on active duty: 689 with the Army and 266 with the Navy or the United States Public Health Service (as of July 1, 1946).

Little Joe Genius says:

The congressional bills of political medicine are certainly being tossed around. They start a hearing on one and as soon as opposition appears they stop hearings. Then they start on a like bill of a different number. The hope is that the opposition will get dizzy and go to sleep and miss one. So keep awake.

SURFACE PHENOMENA



Mony importont telltole signs of hypothyroidism are surface phenomena, involving especially the skin, hoir, and nails.

When hypothyroidism is established as the underlying cause of dry, toneless skin . . . puffy feotures . . . dry, lusterless, "stringy" hair . . . crocked, peeling noils . . . ENDOTHYRIN* affords effective clinicol results.

ENDOTHYRIN is odvonced thyroid medicotion . . . o product of high potency ond dependobility. It consists principally of *thyroglobulin*, the colorigenicolly octive thyroid fraction, essentiolly free of extroneous glondulor moteriol.

ENDOTHYRIN

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Concentroted Thyroid Extract
Consisting Principolly of Thyroglobulin
Contains 0.62% Iodine
Standordized chemicolly by U.S.P. ossoy—clinicolly effective—well toleroted.

SUPPLIED in ½-gr. tablets equivalent in activity to 1½ gr. U.S.P. Thyroid. Bottles of 50, 100, 500, 1,000.

THE HARROWER LABORATORY · At Your Service · GLENDALE CALIFORNIA ·

The HARROWER LABORATORY, *Inc.*
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New York 7 Dollas 1 Chicago 1

*The word ENDOTHYRIN is o registered trodemork of The Harrower Laborotory, Inc.

Political Medicine

MICHIGAN MEDICAL SERVICE

Statement of R. L. Novy, M.D., president of the Michigan Medical Service, before the Committee on Education and Labor, United States Senate:

The administration and operation of a medical care plan is much more complex than the operation of a hospital care plan because of the wide variety of services that must be covered and the number of persons (doctors of medicine) who must render individual services under the plan. A hospital care plan provides for relatively few services offered by relatively few institutions, whereas a medical care plan encompasses hundreds of services offered by thousands of individual doctors. The problem of the medical care plan is, therefore, that of gaining actuarial experience covering a wide range of services and of arranging for the participation of many doctors.

While it was not the first medical care plan sponsored by the medical profession, Michigan Medical Service happened to develop procedures which have made it the most successful of the 63 doctor-sponsored non-profit medical plans now in operation. The procedures developed in Michigan consequently have been accepted as a pattern for many other plans now operating or being organized.

Michigan Medical Service now has 853,151 subscribers and has paid $15,049,278.94 to doctors for services provided in 317,147 cases (as of April 30, 1946). One of every six residents of Michigan is protected by the plan and the growth in number of subscribers last year alone amounted to 140,815 persons. It is expected that Michigan Medical Service will protect a great majority of the people of Michigan within the next few years.

The existence of Michigan Medical Service provided a convenient means for meeting the needs of veterans with service-connected disabilities. In Michigan thousands of such veterans have been permitted to go to their own physicians rather than to a veterans' facility for examination or treatments. Michigan Medical Service pays the doctors for these cases just as it makes payment for services provided to regular subscribers and, in turn, is reimbursed by the Veterans Administration. Not only has this system helped relieve the great pressure on the veterans' facilities, but it also has made it much easier for many veterans to receive needed care.

In addition, Michigan Medical Service is now experimenting with measures which would give relief recipients and welfare clients the same sort of personal service as that being provided to Michigan Medical Service subscribers and to veterans.

Michigan Medical Service is the outgrowth of studies begun early in the 1930's by the Michigan State Medical Society and by various County Medical Societies in Michigan. The studies included an examination of the British Panel System by representatives sent to England for that purpose. It was necessary to secure enabling legislation in Michigan, however, before the program could be put into operation. This legislation was passed during 1939 and Michigan Medical Service began operation on March 1, 1940.

It first offered a complete medical care program, covering medical services rendered in the patient's home, the doctor's office and the hospital. The objective of the doctors of Michigan, in other words, was to provide a medical care program that was complete in every respect.

In the absence of actuarial data, the rate of this complete medical care program was set at $4.50 a month for a full family—a figure which proved to be barely half the actual cost of providing service to the average family. In spite of this half-cost figure, the program attracted only negligible public interest. There developed almost immediately a considerable public pressure for protection against the costs of only major illness, and in response to this pressure, Michigan Medical Service developed a program providing for surgical care in hospital cases. In twenty-seven months, more than 350,000 persons were enrolled for this limited or surgical protection. During the same period of time, the maximum number enrolled under the complete medical care program was only 7,375 persons. Because of lack of public interest, the complete medical care program was discontinued in June, 1942.

It is, however, still the intention of Michigan Medical Service to broaden coverage as rapidly as there is evidence of adequate public interest. In order to determine public interest, a survey utilizing scientific sampling methods and involving personal interviews with nearly 5,000 persons throughout Michigan was undertaken during June and July of 1944. The survey showed that the people had definite interest in a program providing for medical care as well as surgical care in hospital cases, and Michigan Medical Service consequently has developed added protection of this type. The survey also showed that the residents of Michigan still were not interested in a program covering doctor's services in his office and in the patient's home.

Some of the hazards incident to the introduction of a medical prepayment plan are shown in the early experience of Michigan Medical Service. Today, as at the time that Michigan Medical Service was initiated, there still are no sound actuarial data to give a reasonably accurate indication of the costs of such a plan.

Michigan's complete medical care program was offered, as has been shown, at barely half cost and was discontinued because of lack of public interest. Rates for the surgical care program were established to cover twice the amount of surgery that is normally required by the Michigan population. At one time, however, the amount of surgery required by Michigan Medical Service subscribers was nearly four times the normal requirement, and two upward rate adjustments consequently were necessary. The deficit experienced by Michigan Medi-

(Continued on Page 1016)

INTERESTED IN CIGARETTE ADVERTISING?

Claims, words, clever advertising slogans do sell plenty of products. But obviously they do not change the product itself.

That PHILIP MORRIS are less irritating to the nose and throat is not merely a claim. It is the result of a manufacturing difference *proved** advantageous over and over again.

But why not make your *own* tests? Why not *try* PHILIP MORRIS on your patients who smoke, and *confirm* the effects for yourself.

* *Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154*
Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

PHILIP MORRIS

PHILIP MORRIS & CO., LTD., INC.
119 FIFTH AVENUE, N. Y.

TO PHYSICIANS WHO SMOKE A PIPE:
We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

MICHIGAN MEDICAL SERVICE

(Continued from Page 1014)

cal Service reached a maximum of $504,000 and imperiled the operation of the entire program until changes in rates and in procedures brought about liquidation of the deficit and the strong financial position which Michigan Medical Service enjoys today.

While it maintains a separate corporate identity, Michigan Medical Service has joined with Michigan Hospital Service, the Blue Cross Plan providing for hospital care, in the development of a joint health care program. Thus the subscriber enrolls simultaneously for hospital, surgical and medical care, makes single regular payments, and carries a single identification card which, upon display to the doctor and to the hospital admission clerk, procures service for the subscriber.

Thus far the great majority of subscribers to the Michigan program are employees in business and industrial establishments. Two years ago Michigan Medical Service and Michigan Hospital Service began experiments and research looking toward the opening of enrollment to every resident of the state who wishes this protection.

For the enrollment of farmers a very active program is under way. Nearly 400 farm groups already have been enrolled through Farm Bureaus, Granges, farmer co-operatives and the Farm Security Administration.

For the enrollment of the self-employed and others who do not belong to an eligible group, Michigan Medical Service and Michigan Hospital Service undertook last year a program of community enrollment through which interested persons in every part of the state periodically will be given the opportunity to obtain protection through these two organizations.

For persons who cannot afford to pay, Michigan Medical Service and Michigan Hospital Service are seeking a means of co-operating with the government whereby "wards of government" and the indigent will not be segregated to charity facilities but will be entitled to the same sort of service as any subscriber and, for all practical purposes, will be indistinguishable from subscribers paying their own way. The program providing for the care of veterans in service-connected cases offers a suggestion as to how this objective may be realized.

Michigan Medical Service and Michigan Hospital Service also are undertaking long-range planning and have joined with other health groups in the establishment of the Michigan Health Council which has co-ordination and planning as a primary function. This body has established five objectives as follows: (1) complete health pre-payment service for the self-supporting; (2) co-operation with government to furnish health care for those unable to pay; (3) improvement of health facilities and standards; (4) health education of the public; (5) national co-ordination of health activities.

Michigan is a single state and cannot speak for the balance of the nation. However, it is believed that the grass roots approach which is highly sensitive to public demand and local requirements has been fundamentally responsible for the development of the Michigan plan.

SENATOR PEPPER'S BILL ACTIVE

It was generally assumed there would be no action on S.1318 because an all-out effort was being made by the administration to enact S.1606. However, when it became evident that such enactment would be unlikely this year, Senator Pepper revived his bill S.1318 for himself and for Senators Walsh, Thomas of Utah, Hill, Chavez, Tunnell, Guffey, LaFollette, Aiken, and Morse. Hearings were held June 21 and 22. Telegrams were sent to selected persons who were asked to testify. Hearings lasted less than two hours on June 21 and all day on June 22. Most witnesses favored the objectives and the methods proposed. Little opposition was expressed by the hand-picked witnesses.

The Editor telegraphed Senator Pepper, as an individual, expressing his opposition to the bill, asking for copies of the testimony at the hearings and asking if medical societies in general had been given a fair chance to testify. Senator Pepper replied as follows:

WASHINGTON D. C. JULY 10. THANK YOU FOR INFORMING ME OF YOUR VIEWS ON MATERNAL AND CHILD WELFARE BILL. DOCTORS HOWARD AND WALL TESTIFIED ON BEHALF OF THE AMA AND STATEMENTS OF SOME MEDICAL SOCIETIES INCLUDED IN THE RECORD. MEDICAL SOCIETIES GIVEN FULL OPPORTUNITY TO TESTIFY ON MATERNAL AND CHILD HEALTH PROVISIONS OF S 1606 WHICH ARE SIMILAR TO S 1318. THIS TESTIMONY IS BEING CONSIDERED IN DELIBERATIONS ON S 1318. YOUR TELEGRAM BEING INCLUDED IN RECORD AND YOU WILL RECEIVE COPY OF TESTIMONY AS SOON AS PUBLISHED KINDLY FORWARD COMPLETE ADDRESS. BEST WISHES. CLAUDE PEPPER USS.

On July 8 there was an executive session of the full Committee on Education and Labor to report on this bill. Consideration was laid over until July 15, and there was danger that the bill might be reported favorably. There is great popular appeal in legislation providing services for mothers and children, particularly when it seems to operate on a grant-in-aid basis and seems to leave much autonomy to the States; and since this is an election year, legislation that would give "free" services to 46 million persons *would have great political value.*

What Is At Stake? S.1318 provides "free" medical services for some forty-three million children and three million mothers during the maternity period. All told, it would nationalize medicine for 40 per cent of the population. Senator Pepper conceded at the hearings the cost for medical care would be over two billion dollars a year from general revenues. Only the first five million would be matched by the States; the remaining cost would be met by the Federal Government through an open-end appropriation. The initial 100 million dollars is only a token appropriation to get the program started. If the federal government furnishes 98 per cent of the funds, the program will be federally controlled.

While the House might refuse to pass this legislation, *there is always the possibility* that some day this type of

(Continued on Page 1024)

...the *"why"* of success with Ertron in arthritis

THERAPEUTICALLY EFFECTIVE

The findings of various investigators indicate that beneficial effects of Ertron are due to its systemic effect. The Ertronized patient first notices a distinct feeling of well-being. This is followed in a large proportion of patients by a recession of pain, diminution of soft-tissue swelling, increased mobility of the affected joints, improvement of function and resistance to fatigue. The arthritic is enabled to increase his daily activities or to better withstand the surgical procedures of orthopedic restoration.

CHEMICALLY UNIQUE

Laboratory studies over a five-year period prove that Ertron—Steroid Complex, Whittier—contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure form establish the chemical uniqueness of Ertron and its steroid complex characteristics. Each capsule of Ertron contains 5 milligrams of activation-products—biologically standardized to an antirachitic activity of fifty thousand U.S.P. Units.

Physician control of the arthritic patient is essential for optimum results. Ertron is available only upon the prescription of a physician.

Supplied in bottles of 50, 100 and 500 capsules. Parenteral for supplementary intramuscular injection



ETHICALLY PROMOTED

Ertron is the registered trademark of Nutrition Research Laboratories

War Medicine

ONLY NINE TICK-BORNE DISEASES REPORTED IN ARMY THIS YEAR

Only nine cases of tick-borne diseases, four of which were Rocky Mountain Spotted Fever, have been reported in the army since January. In a War Department announcement, Major General Norman T. Kirk, the Surgeon General, warned the peak of anticipated cases is expected during the hot months of July and August. After the first frost, ticks usually hibernate.

Credit for the low incidence of these diseases was due to personal caution practiced by soldiers and careful preventive measures of the Medical Department. Insect repellents, insecticides, and personal inspection are the main control measures employed in the army although vaccination againt Rocky Mountain Spotted Fever may be used for troops exposed to great danger of infection.

Of four cases of Rocky Mountain Spotted Fever, two were reported in O'Reilly General Hospital, Springfield, Missouri, and one each at Fort Bragg, North Carolina, and Camp Carson, Colorado. Other tick-transmitted diseases contracted were relapsing fever, "Bullis fever," Colorado tick fever and tularemia. The latter can also be contracted by handling various specie of wild game. Colorado tick fever was contracted by two soldiers while the others have occurred only once.

Close attention is devoted to this group of tick-borne diseases although military medicine is acutely aware that mosquitoes, flies, mites and lice are more deadly enemies of the military as well as civilian populations.

During 1941 there was one reported case of Rocky Mountain spotted fever in the army. In 1942 there were three, in 1943, thirty-eight, 1944, fifteen, and 1945, five. All-time high set in 1943 is attributed to the millions of troops on maneuvers in tick-infected areas throughout the United States.

Medical officers pointed out that only a small proportion of ticks in nature are infected and capable of transmitting a disease.

Army doctors continually stress that twice-daily inspections of persons in woody or grassy regions will virtually insure immunity from tick-borne disease. It takes the tick, which cannot fly, about six to eight hours to become firmly affixed to the body.

Tweezers, or some similar implement, are advised in removing ticks. In no instance, should they be removed by the naked hand. In the event they are crushed in the process infection may be transmitted to a person through a microscopic scratch in the fingers.

RADIO-ACTIVE URANIUM ISOTOPES OPEN UP UNEXPLORED PROCESSES OF LIVING

An "x-ray" of the dynamic processes of living now is available to medical research.

Possibility of obtaining for the first time relatively large amounts of radio-active isotopes through the uranium piles of the Manhattan District brings basic biological investigation to a new frontier, according to a statement by Major General Norman T. Kirk, Surgeon General of the army, whose office will co-operate in the distribution of the materials to army hospitals.

The Surgeon General said requests for these materials should come from accredited research groups or educational institutions and should be directed to Isotopes Branch, Research Division, Manhattan District, P. O. Box "E," Oak Ridge, Tennessee.

Isotopes as tools of medicine have been compared to the microscope and the x-ray. But these were useful largely for study of the organs of life whereas the isotopes open up the largely unexplored field of the processes of life. It is in this respect, rather than as actual remedies for anything, that the substances are of pre-eminent importance today.

Medical scientists would like to know more about how calcium and phosphorus are used in building teeth and in uniting fractures, how iodine is used by the thyroid gland, exactly what happens when one or more of the glands of internal secretion starts malfunctioning, how the process of wound healing is carried out.

Such questions and hundreds of others whose answers now are among the secrets of life wait upon radio-active isotopes for clarification. Elements such as calcium, phosphorus, sulphur, iron and a score of others can be "tagged" with small amounts of the isotopes and followed through the body through their emission of beta and gamma radiation. The latter is the same as x-radiation.

Some of these radio-active isotopes may find a place as specific "medicine," medical officers point out. The most notable example to date is radio-active phosphorus, known chemically as P32. Phosphorus is an important constituent of both bones and blood. It is carried in the blood stream through the entire body. When the radio-active isotope is administered the blood stream is subjected to a radium-like bombardment. Consequently when the isotope was produced first in the cyclotron about seven years ago there were high hopes that it might mark a long advance towards the conquest of leukemia—a cancer-like condition of the blood in which there is an enormous increase in white cells which, however, do not have the ability of ordinary cells of this sort to combat infection. Despite various complications and disappointments, use of P32 now is generally accepted as the treatment of choice for certain forms of leukemia. It brings about long remissions of the disease. It cannot be considered a "cure" for any leukemic condition in the present stage of the therapy but it is admittedly a long step in advance in the treatment of one of the most difficult maladies known to medical science.

The element iodine tends to concentrate in the thyroid gland. Since radio-active iodine behaves exactly the same as ordinary iodine in the body it was logical that it should be tried in malignant growth of the thyroid.

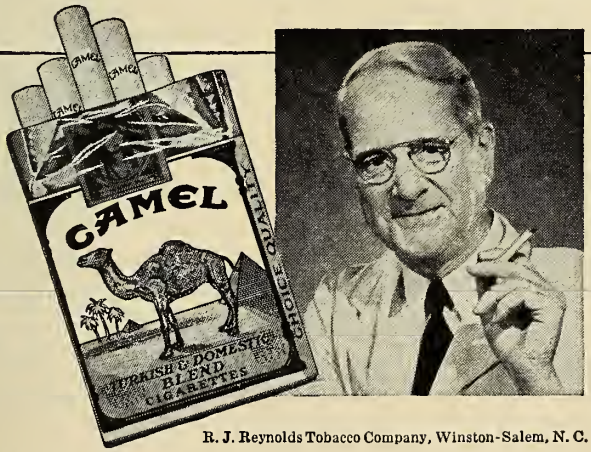
(Continued on Page 1022)



Everybody knows him...

Early or late, he's a familiar figure to every policeman on the street—he's the Doctor—he's on an emergency call!

● A Doctor's life isn't his own to live as he chooses. There are interrupted holidays and vacations and nights of broken sleep. Emergencies require his presence for long, exacting hours . . . with somewhere a pause and perhaps the pleasure of a cigarette. Then back to his job of serving the lives of others.



According to a recent independent nationwide survey:

More Doctors Smoke Camels

than any other cigarette

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

RADIO-ACTIVE URANIUM ISOTOPES

(Continued from Page 1020)

Results to date have been somwhat puzzling and inconclusive. The same is true of other radio-active isotopes which have been tested for specific therapy.

But this whole field of medicine still is almost unexplored and physicians naturally are proceeding with great caution until they know more about specific effects and possible complications. Even if all prospects for the therapeutic use of isotopes fail to materialize, the importance of a relatively abundant supply of these materials remains preeminent.

Any element—ninety-six now are known—is a combination of infinitesimally minute elementary particles. Those are protons, each carrying one charge of positive electricity; electrons, each carrying one charge of negative electricity; and neutrons, which are not electrically charged.

The nucleus of an atom is made up of protons, electrons and neutrons. Revolving around the nucleus somewhat as planets revolve around the sun, are electrons. There are precisely the same number of electrons revolving around the nucleus as there are protons in the nucleus which are not balanced by nuclear electrons. The number of outer electrons is the atomic number.

But there may be an extra neutron in the nucleus. It weighs precisely as much as a proton. It is electrically neutral. Hence, it does not leave room for an extra outer electron. The atomic number remains the same. Element ninety-two, which is uranium, remains uranium so long as there are ninety-two outer electrons. But with an extra neutron in the nucleus it weighs more. This heavier uranium is known as an isotope. Chemically it acts precisely the same as any other uranium.

For reasons not clearly understood various nuclear combinations are unable to stick together and break up with considerable violence. They then are radio-active, shooting out radiations which can be detected by means of various devices. Chief of these is the so-called Geiger counter. By means of it the presence of radio-active atoms anywhere in the body can be detected. For example, a person is given something containing radio-active copper, by mouth. The counter will enable a physicians to follow the course of this copper through the entire process of assimilation by the body.

STUDIES AT DUKE UNIVERSITY CAST NEW LIGHT ON FILTERABLE VIRUS

The filterable virus, probably man's most deadly enemy, is a highly complex structure.

New light on the nature of the almost infinitesimally minute things which are responsible for some of the most dreaded human and animal disease has been obtained from studies at Duke University, according to a report just made to the Office of the Surgeon General of the Army under whose direction experimental work was conducted during the war.

The viruses have diameters of only a few millionths of a millimeter. They are far below the limits of the most powerful optical microscope. Through use of the electron microscope and microchemical techniques, however, it was possible for the Duke investigators to obtain considerable information.

They are so minute that there has been some question as to whether they are actual living things, or large molecules somehow endowed with the ability to reproduce themselves.

But, says Dr. Joseph W. Beard, who was in charge of the Duke investigations under the Army: "These particles cannot be molecules. They are of very complex structure and apparently are enclosed in a membrane."

The studies were made on two viruses—one of which causes a disease of rabbits known as papilloma and the other the human malady vaccinia—and one of the bacteriophages, which are quite similar organizations. These were simpler to study than the influenza viruses which were the ultimate objectives of the Duke investigations. It was felt that any knowledge of viruses in general ultimately might prove of value.

The bacteriophage especially looked like an ultramicroscopic tadpole. It has a well-defined head and a stubby tail. The papilloma virus was spheroidal in shape while the vaccinia organism was like a flattened disk with denser internal material bulging beneath the surface of its "skin."

Other tests showed that these viruses were a little more than half water. The chemical composition of the bacteriophage consisted of a mixture of proteins and lipoids, or basic constituents of fats, in association with a high content of nucleic acids, very complex compounds found in the nuclei of all living cells. The Chief element was baron—about 42 per cent. There also were considerable amounts of nitrogen and phosphorus. The diameter of the papilloma virus was found to be about 65 thousandths of a millimeter.

The work has just been reported through the Army Epidemiological Board.

THREE YEARS OF JAPANESE IMPRISONMENT HAS LITTLE EFFECT ON MINDS OF AMERICAN SOLDIERS

Three years in Japanese prison camps, most of the time on starvation rations and subjected to frequent beatings, had surprisingly little effect on the minds of more than 4,000 American soldiers who survived the ordeal.

Wherever these men landed in the United States after liberation they were met by teams of medical specialists assigned from the Office of the Surgeon General. A report on the neuropsychiatric findings has just been made by Lieutenant Colonel Norman Q. Brill, who was in charge of this phase of the examinations.

Considerable importance was attached to early medical contact with the released soldiers because, says Dr. Brill, "never before in this country's history had such a large group been exposed to starvation, torture and humiliation." The psychiatrists were interested in the factors that were responsible for the survival of these men when so many of their comrades, in about the same phys-

(Continued on Page 1024)

Star of hope in petit mal . . . .



For thousands of children laboring under the social and educational handicaps imposed by petit mal, Tridione, a product of Abbott research, offers new hope. In one series of cases, for example, Tridione was administered to a group of 50 patients suffering from petit mal, myoclonic or akinetic seizures *which had not responded to other medication.* In a period of days to weeks, the seizures ceased in 28 percent of the cases, were reduced to less than one-fourth of the usual number in 52 percent, and were little affected in 20 percent. In several instances, the seizures once stopped *did not return* when medication was discontinued. Tridione has also been shown to have a beneficial effect in the control of a certain proportion of psychomotor cases. Tridione is supplied in 0.3-Gm. capsules, bottles of 100. Literature on request. ABBOTT LABORATORIES, North Chicago, Ill.

Tridione

REG. U. S. PAT. OFF.

(3, 5, 5-TRIMETHYLOXAZOLIDINE-2, 4-DIONE, ABBOTT)

Richards, R. K., and Perlstein, M. A. (1945), Tridione, A New Experimental Drug for the Treatment of Convulsive and Related Disorders, Proc. Chicago Neurological Soc., Jan. 9; and (1946), Arch. Neurol. and Psychiatry, 55:164, February.

Lennox, W. G. (1945), Petit Mal Epilepsies: Their Treatment with Tridione, J. Amer. Med. Assn., 129:1069, December 15.

DeJong, R. N. (1946), Effect of Tridione in the Control of Psychomotor Attacks, J. Amer. Med. Assn., 130:565, March 2.

THREE YEARS OF JAPANESE IMPRISONMENT

(Continued from Page 1022)

ical condition when captured, had succumbed. The nearest they came to finding a common factor, however, was what is described in the report as a "tremendous will to live." Otherwise the soldiers differed in about every possible way.

"All of them," says Colonel Brill's report, "lived only for the day. Indeed when one of them would fail to concentrate on or begin to hoard food, or gave way to morbid thoughts concerning the seemingly hopeless situation, he was earmarked by his companions as quite likely to die shortly. A prisoner who would hoard his rice allowance for several meals in order to enjoy the sensation of one large meal was referred to as 'rice happy.' This was generally as indication of the beginning of deterioration and early demise.

"When those of lesser spiritual strength became ill they were likely to give up, quit eating entirely, and frequently would die within a few days. One fails to find a scientific reason or an adequate term to explain survival. It seemed to some of the examiners that 'courage' was the best word. It seemed that the only common factor among the survivors was that they had courage. They never stopped in their struggle for survival. They ate anything available, including cats, dogs, silkworms and other things repulsive to normal human beings. When struck with dysentery and malaria they would nevertheless attempt to carry on. This strength and courage had no connection with social background or education."

The men themselves, Colonel Brill said, expressed no concern about their ability to readjust to life in the United States. Regardless of the future, they felt, they would meet any situation likely to arise after living through the prison camp years.

TRANSURETHRAL PROSTATIC RESECTION ON ELDERLY PATIENTS

The mortality rate for all patients who undergo transurethral prostatic resection ranges from 1 to 2 per cent. For elderly patients the mortality rate is higher, but it is not more than 2 or 3 per cent.

Complications occur most frequently among the elderly patients, who accordingly require more careful medical care.

Carcinoma of the prostrate occurs more frequently as the age of the patient increases. At present, the treatment of choice in cases of carcinoma of the prostate is transurethral resection and postoperative hormonal therapy. Bilateral orchectomy is reserved for a special group of patients.—Thomas L. Pool, M.D., Minneapolis; Geriatrics, Vol. 1, No. 2, March-April, 1946.—*Ohio State Medical Journal*, May, 1946.

SENATOR PEPPER'S BILL ACTIVE

(Continued from Page 1016)

bill might get through both houses, especially in an election year, as an administration measure, and in the hectic days at the close of a session. It would be a long step toward state socialism. If this country is to go socialist, action should be based on popular referendum, not on legislation which slips through by default or because the people do not understand what is happening.

There is a major threat in the combination of politicians, bureaucrats, and labor leaders seeking self-perpetuation. A federal donation of "free" medical care to 40 per cent of the population exceeds by many fold the largesse of WPA.

Amendments to S.1318 (Pepper EMIC Bill)

With respect to methods of payment (Sec. 103 (a) (6) (C), p. 5, line 13, provision is made to include fee-for-service in addition to the presently specified payment "on a per capita, salary, per case, or per session basis." In the present bill the fee basis is specified only in the case of "consultations or emergency visits." However, *"professional personnel, groups, or institutions would not be permitted to accept supplemental payments from or on behalf of individuals receiving care."*

Thus, if a surgeon signed a government contract which set a $50 limit on charges for a specified operation, the surgeon could not collect any more than $50 regardless of his customary charge or of the financial ability of the patient. There would be created *a permanent medical OPA not on an emergency basis* but for all time. The area of private medical practice would be reduced to the vanishing point and the fees of superior practitioners would be forced to a low level little better than a Government salary.

"Wherever the terms 'medical,' 'physicians,' 'general practictioner,' 'hospital,' are used in the bill, they [are to] be expressly defined to include osteopathic practitioners and hospitals, and osteopathic representation on the National Advisory Committee under Titles I and II [is to] be provided for."

The bill if enacted would establish the principle that the federal government is to furnish medical care as a tax-supported public service for all persons in certain segments of the population *whether or not they are able to pay for such services themselves.* Doctors who cooperated with the EMIC program as a patriotic duty in wartime, providing services for wives and children of servicemen in the four lowest grades, may now be expected to conduct their entire practice under government auspices and controls in the future, insofar as services for mothers and children are concerned. For specialists in pediatrics this means practically no more private practice. For mothers and children it means services under government rules and regulations, enforced use of public clinics, regimentation, et cetera.

Little Joe Genius says:

We see where the UAW-CIO are adopting the business practices of management. Their funds are low, so Mr. Addes states: "About the only place we can make a sharp reduction is in the payroll."

The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 45 AUGUST, 1946 NUMBER 8

New Anti-Histamine Drugs in Allergic Diseases

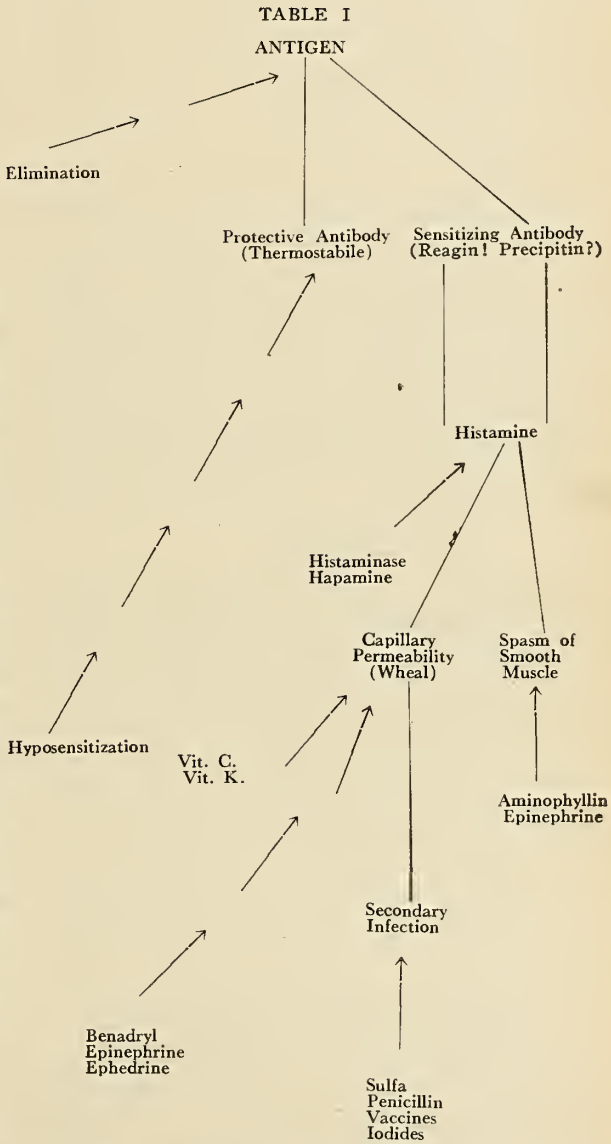
By George L. Waldbott, M.D.
Detroit, Michigan

IN DISCUSSING new remedies for any disease, it is necessary to have an understanding of its mechanism. Concerning the origin of allergic diseases, much is still unknown in spite of considerable progress in recent years. The following diagram illustrates my own conception of the present state of the mechanism of the allergic diseases (Table I).

When the antigen to which a patient is sensitive enters the system, there is a formation of harmful antibodies, namely the "reagins" which are responsible for the allergic wheal. At the same time, a protective antibody originates, which has been demonstrated to be thermostabile and to account for the improvement of the disease. The harmful antibody, the specific reagin present in the bloodstream and in the tissues, produces histamine and histaminelike substances which dilate capillary blood vessels and induce smooth muscle spasm, especially bronchospasm. Thus, the allergic wheal is formed through the action of histamine manifesting itself on the skin, in urticaria; in the nose and sinuses, in hay fever; in the mucous membranes of the bronchi and lungs, in asthma; and in the cerebral structures in migraine. Secondary infection may supervene, such as in chronic sinusitis, bronchial asthma and allergic eczema.

The well-known remedies for allergic diseases are designed to interfere with one or another of these steps in the development of the disease as shown in the diagram. For instance, one may attempt to eliminate the antigen from the patient's surroundings and from the diet. One may endeavor to produce the protective antibody by hyposensitization. Epinephrin and ephedrin con-

TABLE I



tract the capillaries, thus counteracting the allergic wheal. They also relieve smooth muscle spasm. The remarkable effect of aminophyllin in asthma is due to its action on bronchospasm.

Among new measures introduced recently for allergic diseases, those which were devised to counteract histamine have been most promising, at least from a theoretical point of view.

Desensitization

Special attention has been directed in recent years towards counteracting histamine and its effect by daily or, in some instances, hourly injections of histamine in increasing doses. In some patients with urticaria and migraine headaches this has been found useful, but not sufficiently so to warrant its extensive use.

Torantil

The enzyme histaminase, called Torantil, destroys histamine *in vitro*. It, therefore, was an attractive thought to employ it for the same purpose in the allergic patient. Torantil was given in 10 unit doses, six to eight times daily. At first it was enthusiastically received; but after several years' experience, many have given it up. Others continue its use with larger doses (30 units, six to eight times daily) in urticaria and sensitivity to cold. Generalized allergic reactions from Torantil have been reported.

Hapamine

Fell and co-workers[3] combined despeciated normal horse serum with histamine, called Hapamine, and demonstrated that guinea pigs treated with this substance developed resistance against anaphylaxis. Cohen and Friedman[2] actually succeeded in producing specific antibodies against histamine in allergic patients by injections with Hapamine. Yet, clinically, the results were not as satisfactory as was indicated by the favorable outcome of the experimental investigations. In my own experience on more than 120 allergic patients there were only a few cases of contact dermatitis, in which some improvement ensued.

Antergan, Benadryl, Pyrabenzamine

French investigators[1,5] synthetized a number of chemical compounds for which they claim remarkable anti-histamine potency. Among these, the drug "antergan" (N-dimethyl-amino-ethyl-N-benzyl aniline) was most effective in counteracting histamine-induced bronchoconstriction and in preventing histamine from contracting intestinal muscles. Clinically, it was reported[4] that it alleviates symptoms of asthma, hay fever and other allergic diseases.

Here in this country two new drugs have been synthetized on the basis of these previous studies: one is put out by Parke, Davis Company, the chemical formula of which is B-Dimethylamino-ethyl Benzhydryl-Ether-HCL; another is put out by Ciba under the trade name Pyrabenzamine, the chemical formula being Pyridil-N-benzyl-N-dimethylethylenediamine-HCL.

In an attempt to evaluate the efficacy of a drug in allergic diseases, certain well-known difficulties arise. The symptoms of allergic diseases are usually self-limited. Even in chronic, perennial cases, improvement may take place at any time because of spontaneous disappearance of inhaled and ingested antigens from the patient's surroundings and diet. It is likely that spontaneous desensitization to certain antigens, especially to food, occurs frequently. Psychogenic influences often play an important part; it has been demonstrated that the administration of any capsule or injection may bring about relief.

With benzhydryl, or "Benadryl," I have had experience with 165 patients. Certain measures were carried out in order to minimize the chances of being misled by such spontaneous improvement as much as possible. The patients were selected according to their ability to co-operate and to make adequate statements concerning the effect of the drug. They were seen every day while the drug was given and carefully questioned about previously existing symptoms, the immediate and delayed effect of the drug, as well as any possible ill-effect from it. Only those patients were given the drug whose allergic condition had been in a stationary state. While they might have responded at times to other symptomatic drugs, there had been no progress in their general improvement at least for several days. Needless to say, no other symptomatic medication was given at the time when Benadryl was being administered. Special attention was directed toward not making any changes in the general management of the case with regard to diet, type of desensitization and other factors which may have influenced the course of the disease.

Six doses of 100 mg. each of Benadryl were given at first. In my experience with other medications, prolonged administration of a new drug may mislead us in properly evaluating its effect if no

TABLE II. RESULTS WITH BENADRYL

DIAGNOSIS	Total	SYMPTOMATIC RELIEF**			BY-EFFECT						
					SYMPTOMS*						
		Complete	Partial	No Better	None	D	A	N	V	P	M
Bronchial Asthma (Perennial)	48	15(32%)	9(18%)	24(50%)	17	24	2	3			2
Bronchial Asthma (Seasonal)	30	9(30%)	5(16%)	16(54%)	9	20	1				
Hay Fever	31	16(51%)	7(23%)	8(26%)	12	18		1			
Vasomotor Rhinitis	23	10(43%)	7(31%)	6(26%)	16	6				1	
Urticaria	20	16	—	4	11	8			1		
Migraine	4	2	—	2	4						
Allergic Conjunctivitis	3	2	1	—	1	2					
Atopic Eczema	6	1	1	4	3	3					
	165	71	30	64	73	81	3	4	1	1	2

**Lasting for three to five hours

*D—Dizziness and Drowsiness
A—Asthma
N—Nausea
V—Vomiting
M—Muscular Twitching
P—Paresthesia

immediate improvement takes place. If, therefore, the patient did not exhibit an immediately favorable response, the drug was not considered beneficial. On the other hand, if the treatment was helpful, a placebo was given when the patient asked for a second supply of six capsules. Some received sugar capsules; other who had experienced drowsiness from Benadryl were given capsules containing 1.5 grains of phenobarbital in an attempt to simulate the hypnotic effect.

Results

The tabulation as to the various diseases among the 165 cases seen is given in Table II. The ages ranged betwen seven months and seventy-one years. Undoubtedly, urticaria responded most favorably to the medication, sixteen out of twenty reporting prompt and marked relief which lasted as long as four hours after a capsule was taken. In the majority the symptoms tended to return after four to six hours and disappeared again on taking a second capsule. Five of the sixteen patients were given the placebo capsules with no improvements whatsoever. In hay fever the results were equally remarkable. Among thirty-one patients, only eight failed to report benefit, while in the perennial group of allergic nasal disease only six out of twenty-three were not relieved. In several of these patients, I was able to observe objectively how the nasal discharge and the irritation in the eyes began to clear up within twenty minutes. In one, a large polyp became visible after the edema in the nasal passages had subsided. Several hours later, when the effect of the drug had gone, the edema returned and prevented the visualization of the polyp.

Among the asthmatics the results were not as striking as in the other two groups. Sixteen out of thirty of the seasonal (pollen) asthmatics had no benefit whatsoever, while among the forty-eight chronic perennial asthmatics, twenty-four showed no improvement.

Toxicity

The majority of our patients related some degree of dizziness and sleepiness following the administration of the medication. Two complained of considerable twitching, one of numbness of hands and feet; one developed vomiting. Three patients had to discontinue the drug because of severe asthmatic attacks. If these attacks were actually the result of the ingestion of the drug, the possibility arises that there might have existed spontaneous sensitization to it and that the attacks may have been a manifestation of a generalized allergic reaction.

Five patients continued the drug for a period of eight weeks. They reported that it was as effective at the termination of this period as it was before. It must be said, however, that they only took Benadryl when necessary about two to three times daily and not at regular intervals.

Probably the most impressive case was that of S.A., a seven months' old infant who had extremely severe attacks of asthma rather regularly every ten days. They lasted about ten to fifteen hours, and

always terminated in pneumonitis. Their cause was not known. During the course of the attacks extreme shock was present, the child being completely unconscious, having marked cyanosis. The respiration rate ranged between 80 and 90 per minute and the pulse was not palpable. Many efforts had been made to relieve the attacks. Epinephrine, aminophyllin, glucose, oxygen, barbiturates, chloral hydrate enemas were employed, but failed to have the slightest effect on the course of the attacks. When 0.01 gms. of Benadryl was given, orally, a marked change in the child's condition took place within half an hour, the pulse rating dropping to about 90, the respiration rate from 84 to 36. On two subsequent occasions similar observations were made with the drug, particularly a considerable lessening of the duration of the episodes. The child was later given a course of desensitizing injections and the seizures subsided.

Another case of interest is that of W.L., a twenty-one year old veteran who was afflicted with severe urticaria and asthma. Benadryl cleared up the urticaria, after the first dose, whereas the asthmatic attack persisted unabatedly.

Comment

Among the various new measures which I have had occasion to employ experimentally in allergic diseases during recent years, I have never been impressed as much as I am with Benadryl. It is true that the drug is by no means ideal because there are unpleasant by-effects in a large number of patients. The fact that three patients suffered asthmatic attacks shortly after its ingestion, raises the question as to whether or not there may be a spontaneous sensitivity to it in some cases. Yet, most other medications for allergic diseases are not devoid of unpleasant side effects. In comparison with those of ephedrine, the side effects of Benadryl are much less objectionable. Aminophyllin, however, exhibits less unpleasant side effects than Benadryl.

The drug is not a cure for an allergic disease but strictly of symptomatic value. This has been observed repeatedly, especially in those cases in which placebos were given.

Advanced asthma responded much less to the medication than hives and hay fever. This indicates, perhaps, a more pronounced action of Benadryl on the allergic wheal than on the spasm of the bronchial musculature. Should this be true, Benadryl would be an ideal supplement for aminophyllin which is known to be ineffective in hives and hay fever but useful in asthma. Some of the patients with asthma who did not improve readily from Benadryl proved to be cases of infectious asthma; they were subsequently relieved by sulfa drugs or penicillin. This again adds to the evidence that Benadryl may not materially affect bronchospasm which dominates the clinical picture in infectious asthma. The striking results in the patient with infantile asthma are remarkable in support of this theory, if we consider that in infantile asthma there is considerable allergic edema in the lungs[6].

* * *

Since this paper was written, the following additional observations have been made:

1. Others have also encountered asthmatic attacks after the use of Benadryl in a few cases.
2. Unpleasant by-effects of Benadryl are less common if the drug is taken after meals.
3. Patients should be directed to stay at home after taking the drug. I know of a patient who had an automobile accident because his doctor did not warn him about the possibility of drowsiness encountered after taking the drug.
4. With Pyrabenzamine less side effects were encountered than with Benadryl; otherwise the action of both drugs is very similar.
5. New compounds are being manufactured and some of them have been effective. Two drugs about which there has been a great deal of newspaper publicity recently, namely, ethylene disulfonate and anthallan, have no connection with these compounds. The former has been used on eighteen cases in 1942 and was entirely useless in my own experience. The claims made for the second one are not very convincing. At least, one allergist who has used the drug has had no results whatsoever.

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An Experiment in Free Chlorination of Public Water Supplies

William DeKleine, M.D.
and
Raymond J. Faust, C.E.
Lansing, Michigan



WM. DEKLEINE



R. J. FAUST

SEVERAL MUNICIPALITIES in Michigan have introduced a new treatment for their public water supplies. This treatment is called "free chlorination," more commonly known as "breakpoint" chlorination. It may be defined as the application of chlorine in amounts sufficient to oxidize completely all organic matter in the water and to provide a residual of uncombined or "free chlorine."

This treatment was inaugurated by these municipalities at the suggestion of the Michigan Department of Health in an attempt to provide a safer and more palatable drinking water and, more specifically, to determine its relation to the epidemiology of poliomyelitis and other possible water borne diseases. We use the term "possible waterborne" advisedly, because the spread of poliomyelitis through water supplies has never been demonstrated satisfactorily, although often suspected. This program is in the nature of an experiment which, if continued on a state-wide basis for several years, may shed some new light on the epidemiology of poliomyelitis and perhaps other water-borne diseases.

We now know from experiments conducted in our Michigan Department of Health Laboratories that "free chlorination," if properly applied, will inactivate the virus of poliomyelitis in water.[5] Previous methods of chlorination have not inactivated the virus. These old methods of water treatment produce a combined chlorine, such as chloramines which have far less bactericidal value than free chlorine.[3] Ammonia was frequently added to the water, in addition to chlorine, for the definite purpose of producing chloramines. This was considered good practice because the chloramines were supposed to improve the taste of water and also have greater stability in water than "free chlorine," thus carrying combined chlorine residual through the distribution system.

This practice produced a reasonably satisfactory water in most instances according to accepted standards of treatment—except in heavily contaminated supplies. In such instances an excessive amount of chlorine was necessary to insure a safe drinking water.

An illustration of both the old and newer methods of treatment may be taken from the experience of a small city in western Michigan. In the fall of 1944 this city was having considerable difficulty in maintaining a safe and palatable water supply. The source of the water was an inland lake into which a large volume of storm water was discharged, although there was no evidence of direct sewage contamination. Algae and weed growth were luxuriant. This unfiltered water was treated with the usual amount of chlorine, about 1.5 p.p.m., and also about 0.1 p.p.m. of ammonia. This provided a chloramine (combined chlorine) residual of between 0.3 to 0.5 p.p.m. at the pumping station. The resulting tastes were so objectionable that the residents had to depend largely on bottled water for drinking purposes.

The bureau of engineering of the Michigan Department of Health recommended that the ammonia application be discontinued and that the chlorine treatment be increased in an amount sufficient to produce a residual of free chlorine. This required between 4.5 and 5.5 p.p.m., more than three times the amount previously used. It provided a residual of free chlorine at the pumping station of about 1.4 p.p.m. and at a sampling station near the far end of the distribution system of 0.05 p.p.m.

The new treatment produced a water free from coliform organisms, and, to our surprise, a very palatable water. Consumer complaints practically stopped. By increasing the chlorine application and by eliminating the ammonia, all of the organic matter carried by the water was oxidized and only free uncombined chlorine remained. Strangely enough, free chlorine within the limits required for

adequate treatment imparts no taste to the water although an odor is sometimes noted if the residual is high. In previous practice, the inadequate amount of chlorine combines with the organic matter to form unpalatable substances, some of which are chloramines. By adding enough chlorine to completely oxidize the organic matter, most of the objectionable tastes, including the chloramines, are eliminated.

"Free chlorination" of water is a relatively new treatment and is the consummation of a number of experiments by several investigators. Its possibilities were brought to the attention of the water works profession by Brown during the winter of 1939-1940 at Ottumwa, Iowa, where an application of 116 p.p.m. was required to satisfy the chlorine demand of the water.[2] The unusually high organic content of the raw water made it necessary to use such a large amount of chlorine to make it safe for drinking. The finished water was palatable and free of coliform organisms.

"Free chlorination" was used for the first time in Michigan in the city of Trenton in November, 1941. Here raw water was taken from the Detroit River below the metropolitan area of Detroit. It was contaminated with sewage and industrial wastes of this large city. It required from 6.6 to 7.1 p.p.m. to satisfy the chlorine demand and to produce a safe water. The palatability of the water improved remarkably and consumer complaints were fewer. Such large applications were common for sewage disinfection but had never been used, to our knowledge, for water treatment in Michigan.

To show how far this deviated from usual practice we quote from a Michigan Department of Health bulletin on Water Chlorination published in 1937, "For lake waters the average chlorine application of twenty plants is 0.57 p.p.m., and for river water the average application of three plants is 1.45 p.p.m."

The bureau of engineering of the Michigan Department of Health first assumed that because of its higher bactericidal value "free chlorination" was primarily applicable in municipalities that use unfiltered surface water, believing that the old methods of chlorination were reasonably satisfactory for filtered water. Surface water is always a potential source of sewage contamination, and, therefore, logically calls for larger amounts of chlorine if it is not filtered.

This plan had not progressed very far when the Michigan Department of Health became interested in the application of this new form of treatment to all public water supplies with the possible exception of certain deep ground waters that proved to be safe without any treatment.

A study of the epidemiologic records of poliomyelitis in one section of the city of Detroit in 1944, as compared with the rest of the city, and also the records in Trenton prior to and since the introduction of this new method of treatment, seemed to indicate that drinking water might under certain conditions be responsible for spreading poliomyelitis. In the 1944 outbreak there was a very low incidence of the disease in one section of Detroit where the water supply was chlorinated twice, first at the filter plant and later at the booster station in the central part of the city. The low incidence of poliomyelitis in Trenton during the years when "free chlorination" was practiced suggested a correlation between the incidence of the disease and "free chlorination" of public water supplies.

Although it has never been shown that poliomyelitis is spread by drinking water, it is known that the virus is carried in the stools of patients[4,6], and has been isolated from sewage.[1] Since all surface water supplies are more or less contaminated with sewage, it is entirely within the range of possibility that poliomyelitis is spread through improperly treated water, either as drinking water or polluted water at bathing beaches. We had some preliminary evidence in our own laboratory that free chlorination of water did inactivate the poliomyelitis virus. The published data, however, indicated that the virus is not completely inactivated within the range of chlorine treatment commonly used at water plants.

The evidence at hand seemed to warrant a practical field experiment in the application of this new treatment to a number of public water supplies, coupled with a carefully controlled laboratory study of the effect of "free chlorination" on the viability of the poliomyelitis virus in water. The entire south-eastern section of the state, from Ann Arbor on the west, to Flint and Port Huron on the north, was selected for this experiment. Accordingly, the state commissioner of health sent a written invitation to all of the city health officers and superintendents of water supplies in this area, also officers of Windsor, Ontario, and other agencies to attend a conference in the Rackham Building in Detroit on May 18, 1945. This meet-

ing was attended by representatives from practically all of the communities invited, and also the School of Public Health at Ann Arbor.

The purpose of the meeting was outlined by the commissioner of health and the chief of the division of water supply of the Michigan Department of Health. In order to gain the full co-operation of all the communities represented, it was made clear that we were primarily interested in the possible effect of "free chlorination" of water supplies upon the incidence of poliomyelitis. Evidence was presented to show a low incidence of poliomyelitis in the Detroit and Trenton areas referred to where the water supplies had been subjected to additional chlorine treatment. The possibility of producing a more palatable as well as a safer water supply with "free chlorination" was also pointed out.

It was suggested that if all the communities present would participate in this proposed plan for a period of from four to five years it might be possible to determine whether "free chlorination" of public water supplies is a factor in preventing the spread of poliomyelitis.

It was very simple to change from the old to the new method of chlorination in a number of cities. Some changed over immediately. Others had to wait for additional chlorination equipment, which was difficult to obtain.

We are happy to report that one year later, May, 1946, not only have all of the municipalities in the southeastern section of Michigan introduced this new method of treatment, but about 75 per cent of the entire urban population of Michigan is served with water supplies, treated on this basis. "Free chlorination" is now practiced in forty-three cities in the state, including Detroit and most of the cities in the Upper Peninsula.

Whatever results this new method of water treatment may have upon the prevention of poliomyelitis, it has had a most favorable effect in improving municipal water supplies. It produces a far safer water, as indicated by the bacterial tests and a far more palatable water. The chlorine also destroys the algae and has a bleaching effect on coloring matter. It carries a residual of free chlorine into the distribution system, thus gradually removing the organic deposits that have accumulated in the water mains.

The laboratory study in the Michigan Department of Health, to which we have referred, has proven beyond any doubt that "free chlorination"

(Continued on Page 1069)

Imported Tropical Disease — A Community Problem

By Mark Dale, M.D.
Detroit, Michigan



WE ARE CONFRONTED today with a disease problem which, until 1941, was considered by most physicians to be no more than an interesting and curious group of clinical entities. The war veteran is returning to us now after having been exposed for varying periods to almost every known environment, wet and dry, cold and hot, in the jungle, the bush, the veldt, and the swampland. Like it or not, we shall meet this problem with increasing frequency, so it is incumbent upon us to recognize its importance and become versed in the various manifestations of tropical disease.

Over 600,000 men will return to the State of Michigan, many harboring serious tropical disease. From the industrial viewpoint alone, there looms a sizeable loss of man-hours of labor with a decrease in working efficiency, to say nothing of the danger-potential of any chronically ill individual when engaged in occupations requiring mechanical skill and co-ordination. From the sociological viewpoint, we are morally bound to prepare ourselves to treat these veterans when they turn to us for help. From the geographical viewpoint, it takes no great foresight to realize that our world is now a small one, dwarfed by modern aerodynamics and atomic energy, and that further intercommunication of disease patterns must ensue. Epidemic disease may well become endemic disease.

Epidemiologically, we are confronted with an even more serious problem in preventive medicine. Certain factors have been established as necessary for the propagation of disease in epidemic form; first, a *reservoir* of infection; second, a *susceptible non-immune population;* third, *a proper communicating vector or medium;* and fourth, the *proper environment in which the disease, the hosts, and the vectors can flourish.* It is startling to realize that it can happen here, for in the non-tropical

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state of Michigan, we now have all of these essential factors. To add to our great discomfiture, Michigan veterans, particularly, have had a high infection rate with tropical disease both because large numbers were stationed in the Southwest Pacific Area, the Pacific Ocean Area and the China-Burma-India Theater, and because at the time they were campaigning, little, if anything, was known of the prevention of tropical disease. That we have a susceptible population is well established, and we also possess a summer temperature that is well adapted for disease incubation. Finally, to complete the picture for malaria, at least, a personal communication from Dr. Raymond L. Laird[14], of the School of Public Health of the University of Michigan, states that "*Anopheles quadrimaculatus* mosquitoes are present in Michigan and extend up to about the middle part of the lower peninsula." So that it is immediately obvious that we must prepare now to cope with a new group of diseases by looking for them in their latent forms, treating them promptly and adequately, and preventing their full-blown development and spread.

What tropical diseases, then, are being brought back by the veteran of this war? In the order of their importance, they are *malaria, the dysenteries, filariasis, schistosomiasis, the post-typhus syndrome,* and the *tropical dermatoses.* The least important of these will be discussed first.

Tropical Dermatoses

It is sufficient to say of this group that in the vast majority of cases, a fungus is often implicated, at least in the initial dermal infection. Primary causes are bathing in contaminated streams, excessive perspiration, a poor state of hygiene, and general debility frequently due to combined dietary deficiency and some other tropical disease. The dermatoses, or "jungle rot," may involve any part of the body, most commonly the exposed parts, moist areas, and the external auditory canals. In severe acute cases, there may be complete loss of hair and nails, with such marked exudation and loss of serum protein from the lesions, that a regime similar to that used in extensive burns must be instituted. There is deep erythema of the involved skin and severe pruritus. In the more chronic case, immediate improvement occurs as soon as the patient is returned to a temperate climate, although there persists some degree of lichenification, scaling, fissuring and thickening of the skin with deep brownish-purple pigmentation.

At one time it was thought that atabrine was the etiologic agent, but this theory has since been discarded by most dermatologists. In our series of over 400 cases, seen at Percy Jones Convalescent Hospital[8], treatment of the acute cases and those with exacerbations was carried out along conservative lines, employing warm boric-acid soaks, three to five times a day, until the lesions became dry, then soothing with antipruritics and keratolytics. Tar preparations such as pragmatar ointment were quite effective in the more chronic cases. X-ray was used only as a last resort, but with gratifying clinical results. For the auditory canal infections, aqueous zephiran chloride, 1:5000, instilled with an ear syringe once daily for ten days is most effective.[17] One point worthy of note is that a number of these patients deteriorated into "chronic scratchers," perpetuating the lichen simplex variety for an indefinite period.

The Post-Typhus Syndrome

Scrub typhus, or tsutsugamushi fever, is an acute, severe febrile disease caused by the *Rickettsia orientalis* and carried by the mite, *Trombicula akamushi.* Patients who succumb to scrub typhus fever die what is *apparently* a cardiac death, the prominent symptoms being dyspnea, cyanosis, cough and hemoptysis. On the other hand, many of these patients although they are dyspneic and cyanotic, are no more so in the recumbent than in the erect position, which is not compatible with true cardiac failure, and is probably due to poor vascular tone secondary to diffuse vasculitis.[2] Corbett, in 1943, first described the autopsy findings in seven cases of scrub typhus and found striking changes in the myocardium, including marked perivascular cellular infiltration, endothelial proliferation and actual myocardial necrosis.[5] It was my privilege to review these slides at that time in Australia and the pathologic changes were quite clear and definite, yet in those cases which recover, although there may be persistent cardiac complaints, electrocardiographic findings in over 200 patients have been found by Howell to be essentially normal.[12] We reviewed fourteen of such cases in considerable medical and psychiatric detail at Percy Jones Convalescent Hospital and found cardiac neuroses in the form of severe anxiety states and conversion hysterias in 100 per cent.[8] In all cases, the patient stated that his heart had been studied over and over, and numerous EKG studies

had been made. It was difficult, then, for them not to focus their attention on their hearts. At any rate, the returning veteran who has survived scrub typhus will in all likelihood complain of all or a combination of cardiac symptoms, including precordial pain, ease of fatigue, and exertional dyspnea. The problem of whether these patients do or do not have organic disease is at present an open one.

Distomatoses

Distomatosis, the infestation with parasitic flukes, is a disease of importance in a fairly large number of our returning veterans. These parasites may involve the intestinal tract, the liver and the urinary bladder. *Intestinal distomatosis* is caused by *Fasciolopsis buski* and will be found mainly in veterans who have served in China and Japan. The symptoms produced by these, the largest of the flukes, are general weakness, diarrhea, recurrent attacks of nausea and vomiting, ankle edema, and in severe cases, ascites. The liver is usually enlarged and tender and the blood count almost invariably reveals an eosinophilia. The diagnosis is established by demonstrating ova in the stool. Tetrachlorethylene in 3 c.c. gelatin capsules, given once on a fasting stomach and followed in two hours by a saline cathartic is exceptionally effective and is the treatment of choice.

Rectal schistosomiasis, caused by the *Schistosoma mansoni,* is a disturbing Asiatic disease which will be seen in a sizeable percentage of returning veterans. The eggs of this parasite are best demonstrated by making a swab smear of the rectal mucosa on a slide. The disease manifests itself in the following manner: After a period of vague abdominal symptoms and leukocytosis with eosinophilia, dysentery appears. Following this, there develop indications of ascension of the infection in the gastro-intestinal tract with ultimate hepatic and pancreatic cirrhosis and splenomegaly. The rectal mucous membrane becomes exceptionally vascular with the formation of small polyps at the orifice. Prolapse of the rectum is common, complicated by secondary infection. The treatment of choice is sodium antimony III biscatechol 2.4 disulfonate of sodium, commonly known as fuadin, given intravenously or intramuscularly in graduated daily doses until 40 c.c. have been administered over a period of fourteen days.

Hepatic schistosomiasis is caused by infestations with *Schistosoma japonicum* and is characterized early by chills, fever, generalized lymphadenopathy, malaise, and stiffness of the neck[3], and later by cirrhosis of the liver, splenomegaly, ascites, dysentery, progressive anemia and sometimes by focalized epilepsy. Again, the diagnosis is made by finding the ova in the stool, and an eosinophilia in the differential blood count. Treatment includes iron and liver extract for the secondary anemia, a low fat, high protein, high carbohydrate diet supplemented with choline chloride and methionine 1-2 gm. per day, and fuadin in the dosage mentioned previously.

Schistosomiasis of the urinary bladder is an entity which will be seen quite frequently and often misdiagnosed since it may simulate any of a number of genito-urinary disturbances. The disease is produced by *Schistosoma hematobium,* the eggs of which may be readily demonstrated in a centrifuged urine specimen. The symptoms include *hematuria* as a cardinal finding, bladder irritability, frequency, and dull pain in the perineal region. Chronic cystitis occurs when the bladder walls become thickened due to the irritation from the implanted ova.[19] Again we find a leukocytosis with accompanying eosinophilia. Many of these patients may consult the urologist with complications such as massive hematuria, vesical papillomata, and periurethral abscess.

Filariasis

Filariasis, or mumu, is a tropical parasitic disease which infected relatively large numbers of our soldiers. It is caused by the filarial worm, *Wuchereria bancrofti,* carried by the mosquito, *Aedes variegatus,* and may be diagnosed by a history of exposure and by demonstrating the worm in night specimens of blood, dehemoglobinized with water and stained with Bullard's hematoxylin. Presumptive evidence of the infection may be found by the intradermal skin test reaction to the antigen of *Dirofilaria immitis,* the dog heart worm. In King's series of 268 cases, the test was positive in 90.8 per cent.[13] The filariae produce symptoms in the following manner: The worm lodges in the lymphatics and sets up a local inflammatory reaction, then the combination of the worm itself plus the resultant scar tissue produces obstruction to the normal flow of lymph with local swelling, and in extreme cases, grotesque elephantiasis. In the majority of patients the symptoms consist only of local pain, swelling and redness of an arm or leg, or pain and swelling of the scrotal region.[13] The presence of

epididymitis, swelling of the spermatic cord, and recurrent lymphangitis of the extremities should make one suspicious of the presence of filariae. The treatment of most value is the intravenous use of pentavalent antimony compounds, such as neostibosan, giving 50 mg. initially, and gradually working up to a dose of 300 mg. in three injections on alternate days, then 300 mg. daily, in a single injection, six days a week for thirty-three to forty-eight days. There is no immediate result, but within six months' time the filarial levels gradually decrease in the blood. In patients following this regime, no elephantiasis has occurred.[7]

The Dysenteries

Of the diseases most feared from the epidemiologic viewpoint, the dysenteries rank highest. It is appalling to visualize the potential ravaging of a civilian population by a dysentery epidemic arising from a nidus of infected carriers among returned veterans of this war. Both amebic and bacillary dysentery are serious diseases, common in the carrier state and running rampant throughout a susceptible population when adequate checks are not exercised. Control of the disease demands that all sporadic epidemics of dysentery be carefully checked by bacteriologic, serologic and pathologic study, and that more critical, rigid, stool clearance tests be established and satisfied before any patient is adjudged free from potential infection. Fairbrother rightly recommends a minimum of twelve successive stool cultures and microscopic examinations before clearance is to be given.[10]

Bacillary dysentery is caused by the *Bacterium dysenteriae* of which there are many strains, but the commonest offenders in the returning veteran are the Flexner and Sonné groups. Amebic dysentery is produced by infection with the *Entameba histolytica.*

Symptoms in both types of dysentery are similar and characterized by diarrhea, abdominal cramps, marked general malaise, fever, excessive thirst, severe weakness, restlessness and anxiety. Physical examination reveals an elevated temperature in a patient who is dehydrated, with dry lips and skin, sunken eyes and an appearance of general exhaustion. There is generalized abdominal tenderness, most marked in the left lower quadrant. There may be hemorrhoids, anal fissures, excoriation and irritation of the anus due to excessive bowel traffic.

The best treatment in bacillary dysentery is mainly supportive, with intravenous electrolyte replacement, a low residue diet and succinyl sulfathiazole or sulfathalidine in full doses.[1] Vitamin supplements in the form of B-complex are of value because of the resultant decrease in intestinal flora. The time-honored treatment of amebic dysentery by parenteral emetine hydrochloride has given way to oral emetine-bismuth-iodide, 2 gr. nightly, with 300 c.c. of 2.5 per cent chiniofon retention enemas, given every morning and retained for at least six hours. This treatment is carried out for twelve days and then followed by stovarsol, 4 gr. twice daily for ten days.

Amebic abscess of the liver, a much-feared complication, is best treated with emetine-bismuth-iodide orally, penicillin to control the ever-present secondary infection, and finally, surgical drainage.

Some mention has been made in the literature of the effects of emetine on the heart. Cottrell and Hayward[6] found that diminution or inversion of the T waves occurred in one or more leads in twenty-five out of thirty-two cases of amebic infection in which emetine was used. Twelve cases displayed an increase in the PR interval of from 0.02 to 0.04 second. Treatment with bismuth-iodide caused, in seven out of eight cases, diminution in T waves and prolongation of the PR interval. The electrocardiograms in this series returned to normal in from eight to twelve days after the completion of anti-amebic treatment. Apparently, the drugs had no effect on the blood pressure and pulse rate, and there was no clinical evidence of cardiac failure.

Malaria

Malaria outstrips all the tropical diseases in the seriousness and the complexity of the problem that it presents. One fact alone should shake the complacency of any doubting physician—today there are more deaths throughout the world from malaria than from any other single disease! Its insidious mimicry of other disease, its toll in debility, weakness, pain, anemia, and general morbidity, make it imperative that we seriously prepare ourselves to face the problem of malaria in the returning veteran.

Broadly speaking, acute malaria appears as a periodic series of febrile paroxysms, resulting in progressive erythrocyte destruction, debility, and enlargement of the spleen. The types of malaria usually seen in the human are the so-called *"benign tertian,"* due to the *Plasmodium vivax* (which is anything but benign; *"malignant tertian,"* due to

Plasmodium falciparum; and quartan malaria due to *Plasmodium malariae*. By far, the commonest is the infection due to *Plasmodium vivax,* which, when untreated, recurs every forty-eight hours. Quartan malarial paroxysms occur every seventy-two hours if uninterrupted by therapy.

In simple acute tertian malaria, three rather well-defined clinical stages make their appearance. The initial, so-called *"chill stage"* is manifested by a sensation of intense cold, the patient's teeth chatter, and he shivers violently. The sensation of cold is entirely subjective and if the temperature is taken, it will be found to be elevated in the range of 100° to 102°. This stage usually lasts about one-half to one hour. Then ensues the *"fever stage"* in which the feeling of cold is suddenly replaced by a subjective sensation of intense heat. The skin, mouth and lips are parched and dry, the face anxious and flushed and the pulse full, rapid and bounding. Headache and vomiting appear later and are severe. The temperature may rise to as high as 106°. It is here that the body takes its greatest punishment for a period of three to four hours. The final stage of the paroxysm is the *"sweating stage"* in which the patient breaks out in a profuse drenching sweat, the temperature falls rapidly due to the cooling effect of the diaphoresis, the headache lessens in intensity, the vomiting becomes mild nausea, and the attack passes, leaving the patient weak and exhausted. The duration of this stage is from two to five hours.

The patient at this time shows a peculiar muddy pallor to the skin, and a palpable, tender liver and spleen. In the chronic patient with many recurrences, both liver and and spleen assume a more rubbery texture on palpation.

Laboratory findings of significance are first, the *positive blood film* showing the characteristic parasites within the erythrocyte; second, the *leukopenia;* and third, the characteristic *secondary anemia* of blood destruction. A procedure, of value in demonstrating parasites occurring in small numbers, is to make the malaria film from the light "buffy" coat of centrifuged blood, where parasitized erythrocytes tend to gravitate. In a sizeable number of cases, the Kahn test will be positive, but Wassermann and Kolmer titers are not significantly altered.

The complications of malaria are of paramount importance. These may be based upon three main pathogenic factors: (1) Vascular occlusion, (2) hemolysis, and (3) vascular engorgement.

Vascular occlusion by cellular pigment, debris and parasitized red cells is the basis for the cerebral forms of malaria[4] with all their meningitic and encephalitic forms[11]; for the malarial dysentery with the massive stools containing liver-like blood clots; the intestinal obstruction when mesenteric vessels are occluded; and malarial involvement of the optic disc with papillitis in which the pseudo-choked disk mimics that of brain tumor.[15]

The hemolytic phenomenon in malaria is responsible for two well-known complications, both of which, although they may produce death, respond promptly to proper therapy. These are (1) black-water fever and (2) secondary anemia. Black-water fever has no known etiology as far as the actual cause of the hemoglobinuria is concerned, but some workers feel that quinine therapy is often the "trigger mechanism" which sets off the process. The severe, debilitating secondary anemia is due to the constant rupture of parasitized red cells with each succeeding paroxysm, and the resultant loss of both cells and hemoglobin. Immediate alkalization by the intravenous route will save the patient with black-water fever by preventing precipitation of hematin in an acid urine, similar to that seen in some transfusion reactions.

Vascular engorgement in malaria is best noted clinically in the liver and spleen. The spleen becomes a tense, painful organ which may enlarge to the point of producing severe left upper quadrant distress, hiccoughs, and pain in the left shoulder due to irritation of sensory fibers of the phrenic nerve. This type of spleen may rupture spontaneously or because of slight trauma, and when that occurs, the patient experiences a sudden sharp, severe pain in the left upper quadrant. Following this, shock ensues, and the abdomen may become tender and rigid in all quadrants. Death occurs rapidly unless immediate splenectomy is performed.

Treatment of Malaria

The treatment of malaria is at present the subject of widespread controversy. After all the pros and cons have been weighed carefully, one is forced to the conclusion that quinacrine hydrochloride, more familiarly known as atabrine, is the drug of choice.[13]† Atabrine does not *cure* vivax malaria,

†Recent reports from the Board for Co-ordination of Malaria Studies[16] indicate that a new preparation, chloroquine (SN 7618), with an action similar to atabrine, but lacking its skin-tinting effects, may well replace that drug. SN 7618 is as yet not released for general use.

but does abort the acute attack, providing good suppression of relapses, and allowing the debilitated patient to regain his weight, strength, and normal blood picture. By its use, we provide a holding attack against the disease until the patient can muster his own resistance and natural immunity to the disease. This may take months or years, but at least we keep our patient in a good state of nutrition, and also help to keep him at his job.

For the acute relapse in the returned veteran, we recommend a regime which we used in a series of over 4,000 cases of recurrent malaria in Australia.[9] Only two cases out of the 4000, one complicated by malarial mesenteric thrombosis, and the other by severe hepatitis, failed to recover. Bed rest in the acute relapse is an absolute necessity. For the severe headache, analgesics such as aspirin, phenacetin and caffeine in combination with nicotinic acid are excellent. Codeine and morphine are contra-indicated because of their constrictive effect on arteriolar smooth muscle, a factor predisposing to vascular occlusion. Oral fluids should be urged, although they are usually not well tolerated during the chill because of accompanying nausea and vomiting.

The atabrine course is as follows:

0.2 gm. every 4 hours for 6 doses, then
0.2 gm. 4 times a day for one day, then
0.1 gm. 4 times a day for 4 days, then
0.1 gm. daily, usually at meal time, for the next 4 weeks.

Atabrine is best tolerated when taken with food or sweetened drinks.

In the critically ill patient, who is unconscious or suffering from pernicious vomiting due to malaria, it is best to start therapy with either intravenous or intramuscular atabrine dihydrochloride, 0.2 gm. dissolved in 6 to 10 c.c. of distilled water and given every four hours, until oral atabrine is tolerated.

It is well to remember that the aim in atabrine therapy is to introduce *at least 1.0 gm. of atabrine into the patient's body in the first twenty-four hours of treatment.* Atabrine toxicity is of little relative importance for we have seen patients take 0.1 gm. daily for as long as three years with no apparent injury to general health. Reports of decrease in sexual potency due to atabrine are refuted by the finding of high venereal disease case rates in areas populated by atabrine-treated army troops.

Atabrine pigmentation of the skin has frequently been confused with jaundice, and when the dye-tinted serum is subjected to the icterus index test, it leads one further astray. An extremely helpful differential point is the fact that true bile tints the ocular sclerae a deep yellow, whereas atabrine usually does not tint the sclerae at all. In the case in which both atabrine and jaundice appear, the serum bilirubin is the best indicator of the degree of jaundice present inasmuch as the test is based on specific chemical reactions and not on color comparation of the serum.

Malaria must never be underestimated in its ability to mimic other clinical entities. In our series of cases, it has masqueraded as pneumonia, pleurisy, angina pectoris, coronary occlusion, peptic ulcer, acute cholecystitis, acute pancreatitis, acute appendicitis, rheumatic fever, brain tumor, and even insanity. By simply making a malaria smear, a diagnosis may be rapidly established and much time saved.

Summary

With over 600,000 veterans returning to the State of Michigan, many of them harboring tropical disease, it is of increasing importance that we prepare ourselves to meet the problem of treatment and control of these patients.

In general, the tropical dermatoses are controlled well with conservative therapy, using x-ray only as a last resort. Neurogenic factors in the perpetuation of a lichen simplex dermatitis should be treated as well as the local lesion itself.

The post-typhus patient may or may not show evidence of organic heart disease, but many of them have been subjected to such rigorous medical study that they are now cardiac neurotics.

Schistosomiasis is diagnosed from stool and urine specimens and best treated by a vigorous course of either tetrachlorethylene or the antimony compounds. The disease is much more common than is suspected and should be watched for in all cases exhibiting vague or bizarre genito-urinary or gastro-intestinal symptoms.

Filariasis may be recognized from the blood smear or skin test and is best treated by intravenous injections of pentavalent antimony compounds. Elephantiasis has not been reported following such therapy.

Epidemiologically, the dysenteries, both amebic and bacillary, are of cardinal importance, and rigid control measures must be applied to all suspected

carriers. Succinyl sulfathiazole or sulfathalidine is the treatment of choice for the bacillary form, oral emetine-bismuth-iodide for the amebic type. Amebic abscess of the liver is a surgical problem and should be treated with emetine, penicillin and drainage.

Most important of the postwar tropical disease problems is that of recurrent malaria. Atabrine is not a cure for malaria but is the best suppressive and will prevent relapse, allowing the patient to recover from his weakness, debility, and secondary anemia.

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MSMS

Little Joe Genius says:

I see, quote Mr. LaGuardia: "At Law School you just jam them in, and you throw them in, and they listen sometimes, and sometimes they don't listen, and it makes no difference. But in a Medical School you have to have facilities, and you have to have your dissecting rooms, and you have to have your labs, and you have to have faculties, and they are not limited in number." Thanks for the compliment, Fiorella.

Medicine and Industrial Research

By C. F. Kettering

Vice President, General Motors Corporation
General Manager, Research Laboratories Division

OF ALL THE PEOPLE in the world that I admire, there is none that I have any keener admiration for than the doctors. That is for two reasons: First, because of the long period of training which he must undertake, and next, the absolutely hopeless cause he represents after he gets through. Every time the stork rings up a count, the undertaker makes a new coffin. Old Man Time is the one whom you battle and necessarily battle unsuccessfully. But you have this great consolation, if you can pull the boys through the three score years and ten, you are not responsible for what happens after that.

Now as engineers, sanitary engineers, doctors have done a marvelous job, and you gentlemen have done a work which merits the respect which I am sure you get of the community in which you live. You have a real problem on your hands and I think it is remarkable the doctors have done as well as they have. You have been expected to take this complicated mechanism called a human being, and besides knowing the chemical and physical requirements, you have to contend with psychological and mental hysteria and everything else, and you have to prescribe a pill that will be effective for all of them.

Where are we in this whole picture? We have heard something of the inefficiency of statistics and statistical averages, and the fact that statisticians often used them as lamp posts to hold themselves up and not to help them. I happen to know a good lamppost story which fits in with that one.

A gentlemen had come from a Y.M.C.A. meeting one night, and as he got out of the taxi, he reached in his inside coat pocket, took out his pocketbook, and paid the driver. In putting it back, he evidently missed the pocket and he lost his pocketbook. He was searching around under the lamppost with a cane—it was in the fall of the year and the leaves were all over the ground—

and he was pushing the leaves around when a man came up and said, "Did you lose something, my friend?"

He said, "Yes, I lost my pocketbook."

The fellow said, "How did you come to lose it?"

"Well," he said, "I came from a meeting at the Y.M.C.A. and I paid the taxi driver and put my hand back in my pocket and missed my pocket and lost my pocketbook."

The other man said, "Where were you when you paid the taxi driver?"

"I was right down there under that tree."

His friend said, "Well, what are you looking up here for?"

And the man answered, "Well, the light is much better up here."

We are likely to put statistics in where the light is best.

Here is an example of what difficult problems you have today with this complicated system of organic chemistry and physics and engineering and everything else combined. About two years ago, there was a symposium prepared on the effect of radiation on biology. That, in particular, had to do with the effect of sunshine, light cures and so forth, and whether or not you should get outdoors and let Doctor Sun do the work, or whether you should see a doctor once in a while. There are two nice volumes about that thing, well written, and I read them because I happened to be a contributor to it. I am glad to say my contribution is just as worthless as the rest and the reason for it is this: When you get all through with the book you could say, "There is something in this book we do not know. Because when the biologist did the experiment he did not control either the chemistry or physics of it, and if the physicist did the experiment he did not control the chemistry or biology." So all the way through there were two uncontrollable factors in every one of the experiments. Consequently, the data wasn't much good, but there were some generalities in the book which did deserve attention and which could be measured, if, as, and when we recognize that we have to work as groups on this thing rather than as individuals.

I have been interested in medicine for many, many years. I came from an institution, the National Cash Register Company, in Dayton, which was one of the very early companies to put in a study of industrial medicine and industrial conditions. Incidentally, Dr. Herman, who is the doctor who examined me for employment there many years ago, in 1904 to be exact, is still practicing. He is one doctor that has prolonged his own life as well as those of the people he was treating, which hasn't always been the case. Nevertheless, one of the fundamentals of that institution was the health of its employes. I learned a lot about that. After I had graduated from National Cash Register, I started my own organization, and many of the ideas I carried over there were things I had learned at N.C.R.

We tried to carry out this industrial control of medicine. We put in dental clinics and things like that because we felt that we could at least try to catch troubles at the start, which is so important if the doctors are to do a good job. You cannot wait to call the doctor until it is time to call up the undertaker, and expect to get results any more than you can by calling an insurance agent when smoke is coming out of the house. We have to get ahead of this thing if you gentlemen are to do the jobs you have to do.

Now there is an enormous problem in medicine and the work has been done very well. There are lots of problems yet ahead of us. As some of you know, I am interested in some medical research at the Miami Valley Hospital—fever therapy in particular. The way I happened to get interested in this was purely accidental. I drove down to Dayton to a meeting with the refrigerator people, and got in there Friday at noontime. I stopped at a hotel to have a bite of lunch and some doctors were having a meeting. They said, "Come in and have lunch with us." I knew them and I did. They asked me, "What do you think is the biggest problem of practicing physicians?"

I said, "I don't think the problem is any different than any other man's who is working in technical applications. I think the biggest problem anybody has whose work is of a broad technical nature, is how to keep up to date and still earn a living. If you are going to take time to read all the papers that have to do with your particular profession, you have no time to work, and if you are working and paying no attention to reading papers, you are going to get out of date. There is no happy medium there."

They said, "Well, how do *you* do it?"

"I happen to be lucky in my particular case. I have working for me some twenty fellows that have been with me for years and they know about what I know. Consequently, if they read an article they will say, 'Here is something he doesn't know.'

And they mark it and have a photostat made, or send the magazine in. When I come in the boys have a pile of magazines for me with little feathers marking articles. Here is an article that is fifteen pages long and one paragraph of new stuff is marked and that is all there is to it. I have twenty fellows reading for me."

So they said, "Well, how are we going to work it here?"

I said, "I do not know. It seems that you have to do the same thing. You have to get some fellows to do the reading for you and keep you up to date."

Well, the meeting closed there and I went on my business. Some two weeks afterwards, Doctor Martin Fisher, of the University of Cincinnati, was giving one of his talks in Dayton and the boys asked him about it. He said, "Well, it is a new idea and I think it is worth trying out." So they came up and told me that Doctor Fisher approved of my scheme—I have a profound respect for Doctor Fisher—and they said, "Well, now we know how to do this and we have got everything but the money."

So I said, "Well, I think we can fix that." So I underwrote that little experiment for a period of five years with a renewal clause for five years more. And it has worked out very well.

That was really how I got started in this fever therapy work. With Dr. Walter Simpson, a pathologist, we started out in a simple way to do this work. The thing expanded. We tried this little experiment and another little experiment and it gradually grew into this present program of experimental medicine that we are doing down there. Fever therapy is one of the things which you know a lot about, so I won't take any time on it. We have not been interested in selling anything. We have only been interested in trying to find out what were the factors that had to do with the giving of artificial fever, and what could you do with it and what couldn't you do with it. We cannot publish all of the things we know because there are a lot of people who would take advantage of those, the same way they did with x-ray. A few years ago, no matter what was wrong, they gave you an x-ray treatment, with the result that the whole effect of the x-ray was set back ten or fifteen years. That would not have happened if it had been handled in an intelligent way.

I have also been interested in industrial medicine, because in industry you have a chance to contact, under organized methods, a large number of people. Therefore, by virtue of the employment contact, you can have certain medical examinations in which you can get group reaction, rather than the individual patient reaction which you meet in your daily practice. Now there is no conflict between industrial medicine and private practice, because in the many years I have operated in industry we always brought in the doctors to work with us. On anything of this nature there are specific items which can be capitalized on for the benefit of patient, the doctor, and the comunity.

So much for our trade, so to speak. You gentlemen have your paper, your trade paper, and it is just exactly the same as the S.A.E. paper. We have the Society of Automotive Engineers, Chemical Society, Physical Society, and so forth, in which the specific details of the specific professions are brought up, and I presume that you have about the same degree of harmony and agreement that we have in our ordinary engineering.

Just recently I sat in a meeting in which a fellow was talking about certain research investigations that had to do with social and industrial relationships. He said that the greatest difficulty was that we could not get in agreement as to what the data mean. "Well," I said, "that is very, very unfortunate. In industry where we work with a chemical balance, delicate machinery, and the most exact information in the world, we cannot get any agreement on what the data mean, so I don't see why you should worry about that."

We tried to work out a means of testing engines seven or eight years ago. We tried to get the boys to measure the compression of an engine, which is about the most elementary characteristic of an engine. We could not get in agreement so we took an engine and put it on a truck, together with every bit of instrumentation that had to do with it, and we shipped it around to five divisions of General Motors. There was 100 per cent difference in the instrument readings of the five divisions on the same instruments.

If you cannot have agreement on that, I think you fellows will probably have your disagreements too. The whole difficulty is the fact that we are human beings. You could get around a lot of that if you wanted to go out where there weren't any human beings, but it would be so uninteresting I would not want to be there. I would rather work with the human being, even with his

peculiarities and everything else, and be associated with folks, than to be out on a desert island by myself.

What is the future of all this—of industry and medicine and the correlated great health program which you men are interested in? I think we are just in the beginning of it. There was a man in our office this morning talking about the World's Fair in New York before the war, and the forward-looking program, the World of the Future, which that Fair was centered about.

I told him that you cannot make any prophecy as to what you expect in the future without getting a few mistakes, but it pays to know where the arrows point. You cannot get the directions from one case so let's go back and see where our industry and where our accomplishments came from in the past. Let us take this great electric lighting industry—where did that start?

Well, that started from a fellow by the name of Edison who believed that he could take a filament and put it in a bottle and have the current divide between a half dozen of them. He had a terrible time. We have forgotten about most of that because all we do now is press a switch and the lights come on. The bills are perhaps too high—and maybe they are not. It doesn't make any difference, it is the same thing anyhow. We had all of this marvelous information at our hands, but all that stuff is just as inactive and lifeless as the rocks out there in a quarry, until somebody does something that makes it workable.

Suppose we go back fifty years and see if we can spot a few of the points on this arrow. Let's take those fifty years in your profession. Let's go back fifty years and see what chances a patient had then.

I don't know anything about it. I couldn't go back and allocate what you knew and what you didn't know fifty years ago. I could say what you know and what you don't know today. Maybe it isn't very much different than what you knew fifty years ago, but, nevertheless, I would very much rather be sick today than I would fifty years ago.

Now, we have all these complainers, who say, "I think we have developed technologically too fast. I think we have gone too far." I always use you fellows as an example to refute that. I say, "Let's take the medical profession. They have done wonderful jobs. How much too far have they gone? I am sick today. You are sick. How much less good medical attention would you like to have? How many years back would you like to go? Supposing you got a strep infection. Would you like to go back ten years ago? Sulfanilamide has made a wonderful difference in strep infections and it's less than ten years old."

How far back do you ever want to go in any of the things that you know today? You don't want to go back one day.

A few days ago a couple of new books on "Advanced Organic Chemistry" were delivered to me. As I was going out I threw the books in the car, because I thought I would look at them as we drove out to the General Motors Proving Ground. One of the things I particularly looked at was a chapter on proteins. You know, the dietitian today knows all about proteins and hydrocarbons, but those words have just as specific meaning for me as the word "scrap-heap"—just as definite as that. So I thought I would look in the very latest book gotten out by the American Chemical Society on "Advanced Organic Chemistry." I opened the book and said, "Now I will find out what a protein is." The book defined it, "Protein—a very ill-fitting term for a little-known organic compound containing nitrogen." So I thought that my "scrap-heap" was a pretty fair illustration. Yet the expert dietitian today who says you can't mix hydrocarbons and proteins knows it all.

One of the biggest things that I think is going to develop in medicine is that we are going to have physicists and chemists and biochemists and biologists working with us. We have a research project, a very interesting bit of research work, at Antioch College. I say its purpose is to try to find out why grass is green; and, gentlemen, if I never get anything else out of it, the peculiar points of view in letters to me, as to why I don't know why grass is green, are worth the price of admission. I had one from Germany before the war, a rather longish letter, and it said, "My dear Mr. Kettering, don't you know that the reason grass is green is because of the green in the chlorophyll?" Well, he had written to Dr. Martin Fisher and Dr. Fisher said, "I think Mr. Kettering is aware of the fact that grass is green because of the cholorophyll in it, but what he is interested in is why is the chlorophyll green."

The reason I am interested in that is this: Not because I am interested in why the grass is green, specifically, but the only reason that you are here is because grass is green. The only way that we can stop the energy from the sun and hold it here

for our use is by means of the work done in the green leaf of a plant. It takes the water and the carbon dioxide, breaks them down, and builds up those marvelous carbohydrates and proteins about which we talk so glibly and know so little. Right there is the basis of all biology, so we started out to see if we could find anything at all about it, as to how it is done. What is the mechanism in the leaf of that plant by which the energy falling from the sun can be utilized and stored up? I am going to tell you a couple of problems involved in that, because you, as doctors, will be very much interested.

Problem Number One—Given a planet like the earth, with a temperature entirely too high for any of the ordinary biological compounds to exist. It starts to cool down. If you had the job of starting biological works there, what would be the inorganic setup you would put in there, which, plus the radiant energy from the sun, would break down the first molecules of carbon dioxide and water vapor, giving you the beginning of creation?

Problem Number Two—Let's take any human being, Jim Jones, for illustration. Who is Jim Jones? Is he his eyes, his ears, his nose, his arms or legs? Let's draw an organization chart of Jim Jones. Down here are the departments—the department of breathing, that is the lungs; the department of pumping, that is the heart; here is the department of something else, that is the liver, the kidneys, or the stomach; here is the department of seeing, the department of hearing. Who governs them? Well, they now say that certain secretions in the pituitary gland belong here at the top of the chart. That is Jim Jones. So in addition to the functional things, which are the lungs, the heart, blood, and other things, you have those ductless glands, those small things which determine so much and that chemistry is just beginning to learn a little about. Up there too is adrenalin, and then the thing that controls adrenalin—insulin; the addition of a little bit of zinc makes a tremendous difference. So we are just on the threshold, in the kindergarten phase, of knowing anything about the complicated biological chemistry which you gentlemen are asked to be so profound in.

Look at the automobile. I had to invent a thing a long time ago for Buick. They were having the twenty-fifth anniversary of the Buick motor car. It was a terribly hot day in July, when they had the meeting. I was one of the speakers, one of the last speakers—they always have the acrobats at the end. The sales manager got up and said he didn't think that as long as the Buick Motor Car Company lasted they would ever make a better motor car. It was to stop that point of view that I invented "The Automobile in the Glass Case."

All of the boys that had to do with designing the Buick were sitting down in front. "Now," I said, "you gentlemen pick out the best car you can make—one of the super deluxe kind. Let's set it up here on the table. It is perfect, paint job is perfect, upholstering is perfect, engine is perfect, transmission and everything. Let's put it in a glass case, and on the outside—or rather on the inside—we will put the price—$1,500 or $2,000, or whatever it was, just like they used to post the stock on the back door. The understanding is that under no conditions will that motor car change one bit from the day we put it in there. It is hermetically sealed.

A year from today, let's look at that car. It is just as good as it was last year. But the prospective customer says, "It was a good car, but the price is too high. You say $2,000. I will give you $1,800 for it."

Let's come back every year, and at the end of ten years, what do we have? Here is this same beautiful motor car. "But," the customer says, "the junk man is the only fellow who will pay you anything for that."

Why? Because the motor car depreciated? No, it couldn't depreciate in the glass case. It was the appreciation of new car designs. They had appreciated in ten years equal to the sum value of that car.

That is true, clear across the board of every endeavor of humankind. Today it is the best we have, and tomorrow not quite good enough, and day after tomorrow not quite that good, because we know so little about anything. That is not criticizing the many who came before it, but it illustrates how well we use what we have.

Not so long ago we dedicated, down at the Edison Institute in Ford's Greenfield Village, the moving of the Wright Brothers' Shop from Dayton to there. In that village Mr. Ford has Mr. Edison's laboratory and various other things. A great many of the aviation fellows—the top-notch aviation fellows—were there. We also had some of the latest and best models of the aviation craft of today. The interesting thing was this, as I stated to a group of fellows at lunch that day. I said, "Take our last five-year group of flyers. Show them the

original Wright machine to pass opinion on, and they'd say, 'That thing won't fly.'" Why? Because they know too much! They couldn't go back and fly that original machine, because the new technique in aviation over the past twenty-five or thirty years has developed to a point where they wouldn't take a chance on that original flight. But if that original flight hadn't been made, our present high speed flights would not have been made either.

So, if anybody says to you that technological development is being sidetracked, pay no attention to it. It is not being sidetracked in the medical profession. You don't know anything today from which you would let a man die if you knew the remedy. There isn't any surgeon today, if he knew the operation, who would deliberately let a patient die.

That is almost universally true throughout industry today. The public is getting, in every respect, the last bit of information that is available to do the particular thing that is to be done. But that doesn't say how much of the sum total we know.

I want to tell you a little story. A great many of you know about benzine and benzine chemistry. You can also remember back only a few dozen years ago, when they synthesized indigo, and there was a great furore. Nature had made that compound, and, therefore, mankind shouldn't try to synthesize it. That was the beginning of synthesis. Most of the developments in synthetic chemistry have been around benzine. I don't know the exact number, but I presume there are over 100,000 benzine derivatives. We have recently, in this chlorophyll work we have done at Antioch, produced in considerable quantities a material known as porphine. That is of great interest to you as doctors, because porphine is the simplest basic molecule common to both chlorophyll and the hemin in the blood. The principal difference between chlorophyll and hemin is that in the chlorophyll molecule you have an atom of magnesium, and in the hemin you have an atom of iron. That is how close to vegetables we are.

Now this fundamental porphine is the common biological unit which bears the cross for both of them. Whatever benzine is today, porphine chemistry is quantitatively, at least, five times as great. So if we have 100,000 benzine derivative compounds, we are going to have 500,000 porphine derivative compounds. They have this great difference—porphine is light sensitive. Consequently, in addition to having 500,000, you are going to have 500,000 compounds that will have some selective effect in connection with radiation, sunlight, and so forth.

It is a new universe. I mention that because in the book, "Advanced Organic Chemistry," the word porphine apparently is mentioned twice in the whole book, some 2,000 pages.

Your medical business and our industrial business have just begun. As we learn to know about these compounds, learn to know what protein means, what carbohydrate means, what vitamins mean, we are going to have a better comprehension of the thing we call life. We are going to have a better comprehension of all of the things which have to do with public health, with hygiene, and everything else.

The new work done on syphilis has been mentioned quite a bit lately. That is just simply a question of becoming conscious, of getting these things put on the calendar. If you have them on the calendar and recognize them as problems, somehow or other they automatically get solved. The problems that don't get solved are the ones that we don't pay attention to. It works the same way in any research business. People say, "What is research?" I say it isn't anything but a state of mind, not a laboratory, not a chemical balance, not a test tube. It is this: Are you perfectly satisfied with everything that you are doing, with yourselves, with your profession? If you are, you have no need for research. If you are not, research is the fundamental procedure.

Take a tablet, or a blackboard, or a piece of paper, and write down ten things with which you are dissatisfied. If your business is medicine, what are ten things you don't like about the practice of medicine? Ten things you don't like about yourself, about your patients, about your remedies, about your surgical instruments. Write them down, and the very fact that you write them down means that you are going to do something about them.

Now, maybe you can't solve Number One first, because these ten things are just like crossword puzzles. Maybe you can solve Number Seven or Number Eight first. You rub the one you can solve out. You say you can do something about that. Then you put them all down again and put in a new one to replace the problem you can solve. Somehow or other, over a period of years,

by only being conscious that you have those problems, you get them solved. They don't get solved as long as you are not conscious of them. It seems to me that medical meetings, if they don't do anything more than to make us conscious of the problems we have, are worth it.

We have just recently started a new thing in General Motors. It is not really new. It is forty years old, just as old as the automobile engine, but why didn't it come? Because we weren't conscious of what its difficulties were. So a number of years ago, I wrote down on the wall some of the difficulties of the Diesel engine, and said, "Can we lick any of them?" We scratched one out, and two or three years later, we scratched another out.

Today, from our development of the Diesel engine, we are presenting an engine, which, for the same horse power, weighs less than the gasoline engine, and is smaller. You tell that to any old-time Diesel engine man, and he will tell you you are a liar. But don't take our word for it; talk to the engine. We don't deserve any credit for that. We did it by that logical way of writing down and recognizing what the problems were, and seeing if we could solve them. One by one they fell by the wayside, but not without a real struggle, a lot of work. So the thing we regarded five or ten years ago as an absolute impossibility is today a reality.

That is the process of all human development. There is no magician in this business that can take a hat and pull out the solution, but if every individual in the profession becomes conscious of the real problems, they get solved.

I would sooner have 50 or 100 or 200 men conscious of a thing that was to be done, than to have the greatest scientist in the world conscious of it all by himself. Consequently meetings are worth while. Whatever you get from the papers which are read, that is one thing, but that is not the important thing that you are going to take away with you. You are going to say when you leave the meeting, "Yeah, we had a good meeting. Doc Jones read a swell paper, it is something I never knew about." What you take from this meeting that is going to stay with you and is the something you talk about on the steps on the way out. Something you see as you walk through a building is going to make an impression on you; it is going to put some subconscious function of your mind to work, and it will result in an end which will be of great benefit.

All we need to know and realize is that we know so little. We know nothing about this great subject of biological chemistry. It is the most beautifully balanced thing in this world. Change the temperature a little bit, change this or that, and the whole thing is upset. We don't understand that, but that is not our fault. We are not old enough to know yet. It would be like criticizing people who lived fifty years ago for not knowing the things we discovered day before yesterday. Therefore, if we do the best we can in the time in which we live, then we shall have done a fundamental service to the communities in which we live.

MSMS

AN EXPERIMENT IN FREE CHLORINATION OF PUBLIC WATER SUPPLIES

(Continued from Page 1057)

does inactivate the poliomyelitis virus in water, while combined chlorine (chloramines) does so only partially.[5] The chlorine becomes most effective as the chloramines are oxidized and as a residual of free chlorine becomes evident.

We repeat that this program of "free chlorination" in Michigan municipalities is a practical field experiment to determine the possible relation of drinking water to the spread of poliomyelitis. We make no claims that this new method of water treatment will produce the desired results. Poliomyelitis can be transmitted in other ways—by contaminated food, polluted water at bathing beaches, personal contact and, possibly, by insects. We naturally hope that "free chlorination" of public water supplies will have a far reaching influence in the prevention of poliomyelitis. In any event, Michigan municipalities will have a safer and more palatable drinking water.

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Editorial



Art Center—Detroit

DETROIT, THE CONVENTION CITY

Detroit has just passed through a period of being one of the busiest cities of the world. With the war manufacturing, there have been great demands for hotel and other accommodations due to the necessity for officials, soldiers, manufacturers, and others to visit the city and its industries. Now the war is over and the great city can return to peacetime pursuits. That also holds for medical men and their necessary meetings for postgraduate stimulation, the exchange of ideas, the refreshing renewal of friendships, and the increase of knowledge gained from rubbing shoulders.

Detroit is one of the important centers of medical thought and education, besides one of the greatest producers of drugs and chemicals. Wayne University School of Medicine is recognized as a leader, and is planning an expansion, some of which is now under way, which with the clinical and other teaching material in Detroit will make this city one of the outstanding postgraduate teaching centers.

The Wayne County Medical Society is the fourth largest county medical society in the United States, and is housed in a beautiful old mansion, the David Whitney House. This building is a busy gathering place for conferences, committees, social work, and the numerous activities of our most active medical organization. It is a social center to be proud of.

Come to Detroit to this eighty-first annual session to gain a knowledge of the unbelievable advances made by scientific medicine, to see old friends, to make new ones and to enjoy the relaxation from the drive of the last few years.



Book-Cadillac Hotel

EIGHTY-FIRST ANNUAL SESSION

War restrictions have been removed and the Michigan State Medical Society will hold its eighty-first annual session this September. Last year we had no scientific program, although a very good program had been arranged in the hope that the war would be so advanced that we could have another war conference. But we were compelled to cancel the meeting early, because of travel and hotel stringency. The war happily ended in time so that we could have held the meeting. The House of Delegates met, and the

(Turn to Page 1072)

Another Year

A YEAR soon passes by, and the tenure of office is short. Yet with the swift changes that are wrought by time, your officers must keep alert to public need and administer with a sureness that comes from years of familiarity with affairs medical.

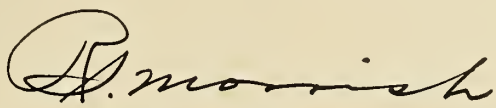
In September the presidency of the Michigan State Medical Society will be taken over by one who has prepared himself for this honored position by years of service in a number of capacities. For a long time he was our treasurer, and during the trying war period kept our financial condition on a sound basis. His record of service as chairman of the Cancer Committee is outstanding, and in many unheralded ways he has caused his influence and good judgment to imprint themselves upon the standard of our good Society.

I welcome Dr. William A. Hyland as my worthy successor and wish him every good success, and similarly all the fine support you have given me.

I appreciate having been your president during the past year, and no one could ask for more genuine help and loyalty than it has been my privilege to enjoy. In retiring, let me express every good wish for the welfare of the Michigan State Medical Society.



President's Page



President, Michigan State Medical Society

meeting was followed by a rheumatic fever conference attended by many members who were in Detroit.

Such restrictions are now a matter of history, and medical meetings are growing in popularity and in interest. Men are back from the services with new experiences and new enthusiasms. That will be featured at our forthcoming meeting in Detroit, September 22, 23, 24, 25, 26, and 27, 1946. The House of Delegates will have a three-day session, as announced in the official call.

The Scientific program is one of the very best ever assembled. A mere listing of some of the names will assure our members that the third week in September will have attractions at the State Medical Society meeting. Better arrange now to be in Detroit then. The Program includes: Edgar V. Allen, M.D., Rochester, Minnesota; R. B. Cattell, M.D., Boston, Mass.; Emil Novak, M.D., Baltimore, Maryland; F. W. Rankin, M.D., Lexington, Kentucky; A. H. Ruggles, M.D., Providence, Rhode Island; J. G. Miller, M.D., Philadelphia, Pennsylvania; F. E. Senear, M.D., Chicago; F. D. Murphy, M.D., Milwaukee; H. E. Alexander, M.D., New York; F. B. Carter, M. D., Durham, N. C.; A. M. Butler, M.D., Boston; R. R. Graham, M.D., Toronto; F. M. Rackemann, M.D., Boston; George Crile, Jr., M.D., Cleveland; C. R. Rein, M.D., New York; Ross Golden, M.D., New York; R. T. Knight, Minneapolis; Phillip Levine, M.D., Linden, N. J.; L. H. Clerf, M.D., Philadelphia; E. B. Spaeth, M.D., Philadelphia; E. H. Rynearson, M.D., Rochester, Minnesota; S. A. Wilkinson, M.D., Boston; N. J. Eastman, M.D., Baltimore; C. W. Mayo, M.D., Rochester, Minnesota.

If any member can afford to be absent from the meeting this year the Committee on Scientific Work will be amazed. The committee has done a yeomanly job, and their presentation is offered as a stupendous attraction.



Detroit Skyline

CRIPPLED CHILDREN ACCOUNTS

A year or so ago we called attention to the doctors through the Secretary's Letter to the fact that doctors are failing to send in their bills for work done for Crippled Children in the Hospitals. The law requires payments to be made through the hospitals, and for years the hospitals have been sending in the notation of the doctor's service with their own bills. The amount paid the doctor was set and the checks came through finally. But for the past year or more some of the hospitals have not been sending in the doctor's bill, or their own, unless he made one out and filed it with the hospital.

The doctors have been asked to send in their bills in duplicate, one to the hospital and one direct to the commission. The reason for this is that the law requires the bills to come through the hospital with the hospital bill, and they must come within sixty days of rendering the service, else they will not be paid. The Commission, however, promise to protect us if they have had a notice of the bill.

The reason for calling attention to this matter is that the Council at its July meeting were told that doctors are losing thousands of dollars, just because the hospital failed to include the doctor's bill when sending their own, and the Commission, not having a memo from the doctor, had no knowledge of the account. After sixty days they cannot be paid. The doctors in one hospital in a city in central Michigan lost six hundred dollars during the past six months.

We all appreciate that doctors have been in the habit of leaving these Crippled Children bills for the hospital to send in because of the law requirement that they be sent in that way, but if we would take the precaution suggested we might be able to take a small vacation on what we would have saved.

CONFERENCE OF PRESIDENTS

THE SECOND ANNUAL Conference of Presidents and Other Officers of state medical associations was held at San Francisco, California, Sunday, June 30, 1946. Thirty-seven states were represented, with 119 officers registered. Numerous resolutions were presented to the Conference, one of which, recognizing the profession's almost unanimous opposition to the Wagner-Murray-Dingell Bill, commended Senator Taft for his vision and forethought in introducing his bill, S. 2143. One called upon the medical societies throughout the nation to perfect, or to organize non-profit voluntary medical service plans as an effective means to furnish the people of their individual states medical service according to American principles and without compulsion.

A resolution urged the American Medical Association to make available a revolving fund of half a million dollars to be used as a loan fund without interest by those states needing help in establishing medical service plans. This resolution had a stormy session in the House of Delegates. The Conference of Presidents passed it unanimously, but the House of Delegates reference committe reported it out with comments that gave the impression the cost of establishing these plans might run into millions of dollars and be beyond the financial resources of the A.M.A. The resolution was voted down by the A.M.A. House of Delegates.

Through the efforts of certain Michigan delegates the attention of the Council on Medical Service and Public Relations was called to the adverse criticism which would result if it became known that the American Medical Association had refused to help finance the formation of its own medical service plans.

The chairman of the Council on Medical Service and Public Relations brought this fact to the attention of the Board of Trustees, who in the afternoon brought forward a plan to make available a fund of $500,000 to be used in establishing medical service plans in all states wherever needed. Thus the American Medical Association helps to solve the problem of low cost prepayment plans in all states not now functioning satisfactorily. There are now thirteen states where studies are in process, and five which have made no move so far.

This action of the American Medical Association received wide publicity in the West.

ARE WE GUINEA PIGS?

UPTON CLOSE talked to the doctors attending the Conference of Presidents and Other Officers, waking the inmost feelings of those who heard him. Mr. Close after a few general remarks told us he had spent much time looking up the history of medicine and medical economics. He has seen estimates from the American Medical Association and from other sources to the effect that the average net income of the profession's 125,000 active members is about $5,000. He figures that the average doctor with his modern education has about $40,000 invested. This includes seven or eight years in college and medical school, and a year at least in hospital service, the average being more. Then there is the time getting established and the expensive equipment the modern doctor must have to do his best work.

Mr. Close said any business would figure 6 per cent return on the capital investment before considering any profit. Take twenty-four hundred off the average net income, and the profession is working for peanuts, $2,600 per year. Something is vitally and fundamentally wrong with this situation. He said he finds that in general, doctors' charges have not increased for twenty years. After all, medicine is big business. These 125,000 have an investment of six billions of dollars, and should have a big influence. The do-gooders, the social schemers and the international labor people have singled out the medical profession as a soft spot to institute their plan for socializing the nation. It has been done before in other nations, and now we are selected as the victims. Mr. Close said he had long wondered why we were singled out for special attention by the reformers and visionaries who attempt to direct great national affairs, but that was no problem after some careful study of the situation. The profession has failed to measure up to its six billion investment.

What are we to do about it? There is just one hope—that the medical profession will rise up in its might and assume the place in the planning of the nation's economy that rightfully belongs to an

industry of six billions of dollars investment. There are indications that that will be done. It must be done at once.

IS THERE A WAY OUT?

The present administration in Washington and its predecessor have pointed the way for us, and in no uncertain terms. They have fostered great strikes in industries that have all but crippled the resources of the nation. They have, through Mr. Wagner, the same man who is attempting to socialize medicine, established by law methods of striking, methods of holding up all the economy of the nation.

Strike! Shall the medical profession strike? Never. That is our first thought and also our last, but there is a difference, and Mr. Close pointed it out to the Conference of Presidents in San Francisco. We can never strike against taking care of the sick and injured, but there is no reason why we should not demand our control of the conditions and circumstances under which we will work. This present trend is intolerable. We have been cogitating the subject for many months, but this analyst is convincing. He says we would not strike against our patients. That is unthinkable. But we could and would *insist* upon the terms under which we would work, and those terms would work no hardship on the public as so many strikes have done.

The medical profession would declare itself as willing to serve under the same terms as we always have; or we would be willing to negotiate, or set up a different set of rules, but only a set that we are willing to accept. The way has been pointed by Mr. John L. Lewis, and others, and the government has upheld them. Why? They are organized to take advantage of the means set up for their particular needs. The Government that has done so much for one group of workers cannot fail to respect another group of workers.

Strike? We are not advocating it. We are simply calling attention to a solution that was suggested to us in good faith and after much study. And Mr. Close is not the only one who has had this thought. We have one national medical organization organized on this principle, and one of the committees of our own state medical society two years ago set out to get, and actually secured, about two thousand pledges from our members that they would not serve under compulsory socialized medicine.

Herb Graffis, a columnist for the *Chicago Times*, writes: "You could hardly expect the doctors, interns and nurses to stay on the job at low pay, like postmen do, without striking. It might not be wise to crowd the doctors too far into regimentation. If the majority of them are put into one big group on straight salary, they'll probably decide the salary is too low and walk out. We'll have to give this socialized medicine considerable thought in view of recent happenings in utility strikes."

NATIONAL HEALTH SERVICE

The most important topic of discussion at the A.M.A. session in San Francisco was the subject of the Wagner-Murray-Dingell Bill, the unfair hearings being held, the attempts to secure a preponderance of favorable testimony, and the fact that that bill is now again being rewritten. The feeling in certain quarters was that this bill cannot pass. There was much favorable comment on the Taft-Ball-Smith Bill, S.2143. There was criticism that the bill was not inclusive enough, or there was some other cause for complaint. It seems that the doctor of medicine cannot support something without condemning it on the side. A resolution was passed by the House of Delegates commending Senator Taft on his good judgment and his support of the ideals of the profession in introducing a bill non-objectionable to the ideals to which we subscribe.

Fearing that the Wagner-Murray-Dingell Bill could not be passed this session, Senator Pepper suddenly called hearings on his bill S.1318, the super EMIC Bill. This bill, as amended, will furnish complete medical care for the 3,000,000 mothers of the nation during their child-bearing period, and the 43,000,000 children under eighteen years of age. This was a surprise move on Senator Pepper's part in an attempt to salvage as much of socialized medicine as possible. Senator Pepper followed the time tried scheme of inviting mostly those known to favor his bill. A preponderance of evidence could be a justifying cause for a favorable vote.

Great changes are in store in Washington; executive reorganization; the direct attempt of the administration to socialize medicine, however they may deny the descriptive term; and the political year which may cause undue pressure by groups with a goal that we may not like. Medicine must be on guard!

THE 81st ANNUAL SESSION

Michigan State Medical Society

Detroit



R. S. Morrish, M.D.
Flint
President



E. F. Sladek, M.D.
Traverse City
Chairman of Council



P. L. Ledwidge, M.D.
Detroit
Speaker, House of Delegates

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, on September 22, 23, 24, 25, 26 and 27, 1946. The Provisions of the Constitution and By-laws and the Official Program will govern the deliberations.

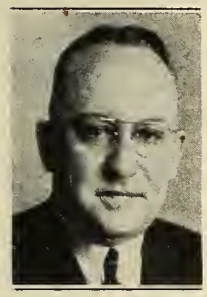
R. S. Morrish, M.D.,
President

E. F. Sladek, M.D.,
Council Chairman

P. L. Ledwidge, M.D.,
Speaker

J. S. DeTar, M.D.
Vice Speaker

Attest: L. Fernald Foster, M.D., Secretary.



L. Fernald Foster, M.D.
Bay City
Secretary



J. S. DeTar, M.D.
Milan
Vice Speaker, House of Delegates



Wm. A. Hyland, M.D.
Grand Rapids
President-Elect

ANNUAL SESSION INFORMATION

Directory

Headquarters.....Book-Cadillac Hotel, Detroit
Registration.....Fifth Floor, Book-Cadillac Hotel
MSMS Hospitality Booth.....Fifth Floor, Book-Cadillac Hotel
General Assemblies.....Grand Ballroom, Fourth Floor, Book-Cadillac Hotel
Technical Exhibit.....Fourth Floor, Book-Cadillac Hotel
Press Room..Parlor "F," Fifth Floor, Book-Cadillac Hotel
Woman's Auxiliary Headquarters....Statler Hotel, Detroit

* * *

Register—Fifth Floor, Book-Cadillac Hotel, Detroit—as soon as you arrive.

Admission will be by badge only to all Scientific Assemblies, and Section Meetings. Monitors at entrance.

Bring your MSMS or AMA Membership Card to expedite registration.

No registration fee to members of the Michigan State Medical Society.

Hours of Registration: Daily 8:30 a.m. to 5:00 p.m. Tuesday, Wednesday, and Thursday September 24, 25 and 26 and from 8:30 a.m. to 3:15 p.m. on Friday, September 27.

* * *

Michigan Doctors of Medicine, not members, if listed in the American Medical Directory, may register as guests upon payment of $5.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1946 ONLY, provided they subsequently are accepted as members by their County Medical Society.

* * *

Guests—Members of the American Medical Association from any state, or from a province of Canada, and physicians of the Army, Navy and U. S. Public Health Service are invited to attend, as guests. No registration fee. Please present credentials at the Registration Desk.

Bona fide doctors of medicine serving as interns, residents, or who are associate or probationary members of county medical societies, if vouched for by an MSMS Councilor or the president or secretary of a county medical society, will be registered as guests. Please present credentials at the Registration Desk.

* * *

Telephone Service—Local and Long Distance telephone service will be available in the Book-Cadillac Hotel.

In case of emergency, doctors will be paged from the meetings by announcement on the screen.

Call the Book-Cadillac Hotel, Cadillac 8000 and ask for the MSMS telephone extensions.

* * *

Checkrooms are available in the Book-Cadillac Hotel.

* * *

Guest Essayists are very respectfully requested not to change time of their lecture with another speaker without the approval of the General Assembly. This request is made in order to avoid confusion and disappointment on the part of some members of the audience.

* * *

W. B. Harm, M.D., Detroit, is General Chairman of the Detroit Committee on Arrangements for the 1946 MSMS Annual Session.

PAPERS WILL BEGIN AND END ON TIME

Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time, in accordance with the schedule in the program. All who attend the meeting, therefore are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

"Ubiquitous Hosts"—Doctors of Medicine who place themselves generally at the disposal of the 27 guest essayists who are on the Program of the 81st Annual Session in Detroit have been selected. These Detroit physicians, who will demonstrate the meaning of Michigan Hospitality, include H. J. Kehoe, M.D., Grover C. Penberthy, M.D., F. R. Menagh, M.D., A. E. Catherwood, M.D., Douglas Donald, M.D., V. C. Johnson, M.D., J. Lewis Dill, M.D., E. C. Texter, M.D., Ira G. Downer, M.D., J. J. Lightbody, M.D., E. C. Long, M.D., Reece H. Horton, M.D., Wm. Quigley, M.D., N. M. Bittrich, M. D., Frederick Lauppe, M.D., C. N. Swanson, M.D., Robert B. Kennedy, M.D., C. Stuart Wilson, M.D., John C. Montgomery, M.D., Warren W. Babcock, M.D., James R. Rogin, M.D., Ray Schirack, M.D., and E. H. Lauppe, M.D.

Sincere thanks are extended these hosts for their tangible help in making the MSMS Annual Session an outstanding success.

* * *

Press Relations Committee—Harry F. Dibble, M.D., Detroit, Chairman, W. A. Chipman, M.D., Ralph Johnson, M.D., J. J. Lightbody, M.D., G. Thomas McKean, M.D., and C. J. Smyth, M.D.

* * *

Public Meeting—The evening assembly of Wednesday, September 25, 1946—Presidents' Night—will be open to the public. Invite your patients and other friends to this interesting meeting. The program (complete on page 1084) is highlighted by:

8:30 p.m. President's Address
Induction of President-elect
9:30 p.m. Biddle Oration, by C. F. Kettering, Detroit.

* * *

State Society Night—Thursday, September 26, 1946.
10:00 p.m. Dancing for MSMS members and their ladies. Floor Show.
Grand Ballroom, Book-Cadillac Hotel, Detroit

You Are Cordially Invited
to Visit the
MICHIGAN STATE MEDICAL SOCIETY
HOSPITALITY BOOTH
Opposite the Registration Desk
Fifth Floor, Book-Cadillac Hotel

Stop and Chat With Your State Officers

The Annual Committee Organization Luncheon, a meeting of MSMS committee chairmen appointed by President-elect Wm. A. Hyland, M.D., to serve during the year 1946-47, will be held on Wednesday, September 25, 12 noon, in Parlor K of the Book-Cadillac Hotel.

* * *

Technical Exhibits—84 displays—will open daily at 8:30 a.m. and close at 6:00 p.m. with the exception of Friday when the Exhibits will close at 3:15 p.m. Frequent intermissions to view the exhibits have been arranged before, during and after the General Assemblies and Section Meetings.

PLEASE REGISTER AT EACH BOOTH

* * *

Seven General Assemblies, Wednesday, Thursday, Friday, September 25, 26, 27 (see pages 1081, 1083, 1084, 1085, 1086 and 1087).

Ten Section Meetings on Wednesday, Thursday, Friday. All Sections will meet at luncheons in the Book-Cadillac Hotel, 12:00 noon to 1:30 p.m. (see pages 1081, 1085, 1087).

* * *

The Michigan Pathological Society will meet in Detroit on the occasion of the Annual Session of the Michigan State Medical Society. The pathologists have arranged a program for Thursday, September 26 at the Statler Hotel, beginning at 3:00 p.m. and ending at 11:00 p.m. An informal seminar on "Diseases of the Breast" will be lead by C. F. Geschickter, M.D., of Baltimore.

Dinner will be served at the Statler at 6:30 p.m. and the pathologists will have their final meeting at 7:30 p.m. at the Hotel.

A. L. Amolsch, M.D., of Detroit is President, S. E. Gould, M.D., Eloise, is President-Elect and D. H. Kaump, M.D., Detroit, is Secretary-Treasurer of the Michigan Pathological Society. All MSMS Members are invited to attend the sessions of the Michigan Pathological Society.

* * *

The Michigan Society of Anesthetists will hold a dinner in the Founders' Room of the Book-Cadillac Hotel, Detroit, on Thursday, September 26, 6:30 p.m. All members of the Michigan State Medical Society are cordially invited to this dinner-meeting. H. J. Van Belois, M.D., 522 Medical Arts Building, Grand Rapids 2, is in charge of arrangements.

COUNTY SECRETARIES' CONFERENCE

Washington Room, Book-Cadillac Hotel
Wednesday, September 25, 1946
5:30 to 8:30 p.m.

B. Saltonstall, M.D., Charlevoix, *Presiding*

Program

1. "Medicine Moves Forward" (10 minutes)
   L. Fernald Foster, M.D., Bay City
   Secretary, Michigan State Medical Society
2. "Modern Medical Public Relations" (10 minutes)
   Hugh W. Brenneman, Lansing
   Public Relations Counsel, Michigan State Medical Society
3. "A Newspaperman's View of the Medical Profession" (30 minutes)
   Michael A. Gorman, Flint
   Editor, *The Flint Journal*

All Members of the State Society will be Welcome at this Conference

NINETEEN DISCUSSION CONFERENCES

These quiz periods will be held Wednesday, Thursday, and Friday, September 25, 26, 27, at 4:15 to 5:15 p.m. An opportunity to ask questions concerning the presentation of the guest-essayists, or to discuss one of your interesting cases with them, will be provided.

Wednesday: Discussion Conferences on Medicine, Surgery, Dermatology, Obstetrics, Radiology, Otolaryngology and General Practice.

Thursday: Discussion Conferences on Surgery, Medicine, General Practice, Pediatrics, Anesthesiology, Ophthalmology and Obstetrics.

Friday: Discussion Conferences on Gynecology, Medicine, Pediatrics, Surgery, and Syphilology.

Please submit your questions, on forms printed in the Program* to the Secretary of the General Assembly immediately after the termination of the lecture, in order that the guest essayist may have time to consider same before the quiz period at 4:15 p.m.

*Forms in official program.

Postgraduate Credits are given to every member who attends the 81st Annual Scientific Session of the Michigan State Medical Society, Wednesday, Thursday, and Friday, September 25, 26, 27, 1946, at Detroit.

* * *

Alpha Kappa Kappa medical fraternity will hold a reunion at the Statler Hotel, Detroit, during the MSMS Annual Session. The date is Thursday, September 26; the hour 6:30 p.m. (dinner); the speaker, Albert B. Landrum, M.D., Columbus, Ohio, Pi '06, a urologist whose topic is "Fraternal Prostates." Please register at Mead-Johnson booth. For full details contact Lynn A. Ferguson, M.D., 72 Sheldon, S.E., Grand Rapids, Michigan.

* * *

Marjorie Shearon, Ph.D., Washington, D. C., research analyist, author of "Economic Insecurity in Old Age" and other socio-economic works, will deliver an address on "The Washington Scene—and Behind the Scenes" before the MSMS House of Delegates at its final meeting of Tuesday, September 24, 8:00 P.M. All MSMS members are cordially invited to hear the revealing report on social activities and plans, including medicine, which are taking place in Washington, D. C.

* * *

Monitors for Section Programs—W. B. Harm, M.D., Detroit Chairman for the 1946 Annual Session, has announced the appointment of the following monitors for the Section Programs:

Section on Surgery
Donald Somers — Lawrence Pratt
Section on Medicine
E. D. Spalding — Paul Noth
Section on Pediatrics
Paul Sonda — John C. Montgomery
Section on Dermatology and Syphilology
Chester A. Doty — George Sewell
Section on Gynecology and Obstetrics
L. E. Bauer — C. F. Shelton
Section on Radiology, Anesthesia and Pathology
James Lofstrom — V. C. Johnson
Section on Ophthalmology and Otolaryngology
William Gonne — I. S. Schembeck
Section on General Practice
E. C. Long — E. H. Fenton

PROGRAM OF MOTION PICTURES

Davis & Geck will present a series of surgical motion pictures during the intermission periods. Pictures to be shown represent classic and modern operations as performed by outstanding surgical authorities.

Through the D & G Surgical Film Library, over three hundred pictures are available to medical schools, hospitals and other accredited medical and surgical societies. Film catalogs will be available at Booth No. 61 where the pictures will be shown. Following is the program of films:

WEDNESDAY, SEPTEMBER 25

8:30 **Left Upper Lobectomy for Pulmonary Tuberculosis**
RICHARD H. OVERHOLT, M.D., and Associates, Boston

9:50 **Transthoracic Partial Gastrectomy with Intrathoracic Esophageo-gastric Anastomosis for Carcinoma of the Cardia.**
RICHARD H. SWEET, M.D., Massachusetts General Hospital

11:25 **Esophageal Diverticulum — Lahey's Two-stage Operation for Diverticula of the Pulsion Type.**
FRANK H. LAHEY, M.D., Boston

11:45 **Hernioplasty for Direct Inguinal Hernia.**
LAWRENCE S. FALLIS, M.D., Henry Ford Hospital, Detroit

2:30 **Surgery of the Common Bile Duct**
CHAS. B. PUESTOW, M.D., University of Illinois, School of Medicine

5:15 **Aseptic Ileocolostomy and Resection of Right Colon for Cancer.**
FRED W. RANKIN, M.D., Lexington, Ky.

5:45 **Complete Laceration of the Perineum**
LOUIS E. PHANEUF, M.D., Boston

THURSDAY, SEPTEMBER 26

8:30 **Cholelithiasis with Common Duct Stone**
RALPH BETTMAN, M.D., Rush Medical College, Chicago

9:50 **Pancreato-Duodenal Resection for Carcinoma of the Head of the Pancreas or Carcinoma of Ampulla of Vater.**
RICHARD B. CATTELL, M.D., Lahey Clinic, Boston

11:25 **Partial Resection of the Stomach for Duodenal Ulcer**
SAMUEL F. MARSHALL, M.D., Lahey Clinic, Boston

2:30 **Surgical Treatment of Hypertension by Lumbodorsal Splanchnicectomy.**
R. H. SMITHWICK, M.D., Massachusetts Gen. Hospital

2:40 **Delivery of Quadruplets by Cesarean Section**
JOHN C. ULLERY, M.D., Philadelphia Lying-In Hospital

5:15 **Right Pneumonectomy for Primary Carcinoma of the Lung.**
RICHARD H. OVERHOLT, M.D., New England Deaconess Hospital

5:35 **Bilateral Femoral Vein Interruption for the Treatment of Deep Venous Thrombosis and Pulmonary Embolism**
ROBERT R. LINTON, M.D., Boston, Mass.

FRIDAY, SEPTEMBER 27

8:30 **Partial Resection of the Stomach for Duodenal Ulcer**
SAMUEL F. MARSHALL, M.D., Lahey Clinic, Boston

9:50 **Upper Selective Thoracoplasty for Pulmonary Tuberculosis Operation Performed in Three Stages: With Intervals of ten to fourteen days.**
RICHARD H. OVERHOLT, M.D., and Associates, Boston

10:15 **Intervertebral Disc Injury, Herniated Nucleus Pulposis**
History and Clinical Findings.
RUDOLPH JAEGER, M.D., Jefferson Hospital, Philadelphia

11:25 **Transthoracic Total Gastrectomy. Intrathoracic Esophageo-jejunal Anastomosis for Carcinoma of the Stomach**
RICHARD H. SWEET, M.D., Massachusetts General Hospital

2:30 **Surgery of the Biliary Tract**
RALPH BETTMAN, M.D., Rush Medical College, Chicago

Support of the Paralyzed Face with Fascia
J. BARRETT BROWN, M.D., and F. R. MACDOWELL, M.D., Washington University, School of Medicine

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The Medical Film Guild's Library will show the following films daily in Booths 7 and 8.

Rehabilitation for Parkinson's Syndrome

(Color and sound—projection time—54 minutes)

This film, a landmark in teaching brain disorders, presents this subject in all embracing fashion as a motion picture textbook. The various clinical signs in the patient such as masked facies, spasticity, and tremors as well as conditions in athetosis introduce this subject. Anatomical structures and synaptic physiology are extensively depicted. Contributions in this field by Horsley, Meyers, Bucy, and Putnam are evaluated in comparison to the modern concept of Klemme who extensively analyzes 200 surgical cases. A complete operative procedure step by step is shown together with pre and post operative conditions of patients.

Non-Operative Treatment of Paranasal Sinusitis

(Color and sound—projection time—15 minutes)

This presentation is designed to outline an intelligent approach to the conservative management of those sinus infections that are encountered in the daily routine. Only simple proven forms of therapy are mentioned which have proven efficacious as demonstrated by many years of routine clinical employment.

Cervicitis—Etiology and Treatment

(Color and sound—projection time—50 minutes)

The cervix as a foci of infection for other uterine involvements is discussed from the etiological and anatomical viewpoints. An analysis is made showing the bactericides formerly used as compared to modern concepts of bacteriostasis including the sulfonamides and penicillin. A rationale for effective clinical treatment is developed from these studies. Classification shows cervical disease ranging from simple erosions to cystic conditions and on to further involvments requiring major surgery. Methods of cauterization and surgical repair using the Sturmdorf Tracheloplasty technique are illustrated. Research by several medical schools evolving a routine clinical treatment is statistically analyzed.

Treatment of the Major Neuralgias

(Color and sound—projection time—50 minutes)

Involvements affecting the spheno-palatine nerve the glosso-pharyngeal nerve and the trigeminal nerve are analyzed both anatomically and physiologically. The work of Erlanger (Nobel Prize Winner 1944) in nerve physiology is demonstrated. The interrelation of dental and medical problems are discussed. Typical case histories, both clinical and surgical, of patients with spheno palatine neuralgia, glossopharyngeal neuralgia and trigeminal neuralgia are presented. The procedure of the accurate differential section for surgical relief of trigeminal neuralgia overcoming eye complications is vividly shown and the results tabulated statistically.

(Continued on Page 1102)

GUEST SPEAKERS



H. E. Alexander



E. V. Allen



A. M. Butler



Bayard Carter



R. B. Cattell



L. H. Clerf



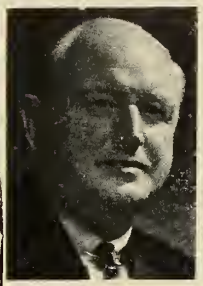
J. W. Conn



G. Crile, Jr.



N. J. Eastman



R. R. Graham



R. T. Knight



P. Levine



C. W. Mayo



T. G. Miller



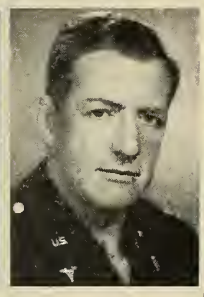
F. D. Murphy



E. Novak



F. W. Rankin



C. R. Rein



Leo G. Rigler



F. M. Rackemann



A. H. Ruggles



E. H. Rynearson



F. E. Senear



E. B. Spaeth



I. B. Taylor



S. A. Wilkinson

Woman's Auxiliary



Mrs. L. C. Harvie
President, 1945-1946

CONVENTION COMMITTEES

Mrs. William L. Sherman.....Convention Chairman
Mrs. L. Paul Sonda.....Co-Chairman
Registration and Credentials—Mrs. Milton A. Darling
Tickets—Mrs. Lowell S. Selling, Chairman; Mrs. Russell T. Costello, Co-Chairman
Finance—Mrs. Galen B. Ohmart
Flowers—Mrs. George M. Laning
Press—Mrs. E. C. Baumgarten
Hospitality—Mrs. H. L. French, Chairman; Mrs. E. L. Whitney, Co- Chairman; Assited by members from all County Units
Printing—Mrs. Charles J. Barone
Tea—Mrs. A. O. Brown, Chairman; Mrs. Frederick G. Buesser, Co-Chairman; Mrs. Herman D. Scarney, Co-Chairman
Banquet—Mrs. Robert J. Schneck, Chairman; Mrs. Carl H. Schulte, Co-Chairman
Luncheon—Mrs. T. Grover Amos, Chairman; Mrs. Clarence H. Eisman, Co-Chairman

An Invitation

It is an honor and a pleasure for Wayne County once again to act as host to the Michigan State Medical Society and its Auxiliary. We extend a most cordial invitation to all Auxiliary members as well as the wives and guests of physicians who plan to attend the State Convention to participate in the social functions and attend the annual meeting. We hope your stay in Detroit will be most stimulating and enjoyable.

Alvena P. Sherman,
Convention Chairman

Program

Tuesday, September 24, 1946

9:30 A.M. **Registration Opens. Ballroom Floor, Hotel Statler**
Foyer near English Room

6:30 P.M. **Dinner for Past Presidents and Secretaries Club of State Auxiliary**
Residence of Mrs. A. O. Brown. (Acceptance essential). Hostesses: Lansing members.

Wednesday, September 25, 1946

9:30 A.M. **Registration Opens. Ballroom Floor, Hotel Statler**
Foyer near English Room

10:00 A.M. **Finance Committee Meeting.** 4
Mrs. Wm. J. Butler, Chairman

11:00 A.M. **Brunch and Pre-Convention Board Meeting**
Woman's City Club

3:30 P.M. **Tea**
In honor of Mrs. Jesse D. Hamer, of Phoenix, Arizona, 1946-47 President of the Woman's Auxiliary to the American Medical Association.

6:30 P.M. **Banquet (Informal) Michigan Room, Hotel Statler**
Speaker: Mrs. Jesse D. Hamer

8:00 P.M. **MSMS President's Night, Book-Cadillac Hotel**
Biddle Oration

Thursday, September 26, 1946

10:00 A.M. **Annual Meeting**

1:00 P.M. **Annual Luncheon. Hotel Statler**
Program: "The Lady of Godey's," reviewed by Mrs. Geo. W. Francis, assisted ed by Auxiliary members

4:00 P.M. **Post-Convention Board Meeting**
Mrs. R. H. Alter, presiding

10:00 P.M. to 1:00 A.M. **DANCE**
For MSMS members and wives at Book-Cadillac Hotel

Eighty-First Annual Session—1946

PROGRAM OF GENERAL ASSEMBLIES

WEDNESDAY MORNING
September 25, 1946

First General Assembly

Ballroom, Book-Cadillac Hotel

E. R. WITWER, M.D., *Presiding*

L. FERNALD FOSTER, M.D. and J. D. LITTIG, M.D., *Secretaries*

A.M.

9:00 "The Challenge of Intravascular Thrombosis and the Clinical Use of Anticoagulants"

EDGAR V. ALLEN, M.D., Rochester, Minnesota

Associate Professor of Medicine, Mayo Foundation, Graduate School, University of Minnesota.

A great deal of attention has been given to the problem of bleeding but very little attention has been given to the problem of intravascular thrombosis. It is quite apparent that intravascular thrombosis is responsible for a great deal more disability and mortality than is hemorrhage. It is time that the medical profession directs a fair portion of its efforts toward the prevention of intravascular thrombosis and the treatment of it. One of these methods of approach is the use of anticoagulants. Experience with heparin and dicumarol has indicated that when these substances are used expertly, intravascular thrombosis can be prevented, and prevented from extending once it has occurred. As a result of this, the incidence of venous thrombosis has been greatly reduced and fatal pulmonary embolism has been prevented in many instances. This report is of the experience with anticoagulants in the prevention of, and treatment of, intravascular thrombosis in 1,686 postoperative cases. Our studies indicate that approximately seventy-three lives were saved and that 211 patients were spared the experience of venous thrombosis.

9:25 "The Surgical Treatment of Carcinoma of the Colon"

FRED W. RANKIN, M.D., Lexington, Kentucky

Clinical Professor of Surgery, University of Louisville and Brigadier General, U. S. Army, Chief Consultant in Surgery.

Cancer is the most frequent lesion of the large bowel treated by the surgeon. More familiarity with the symptoms of colonic carcinoma and continued advances in radiologic technique are apparently bringing patients with these lesions to seek attention at an earlier period than formerly. More meticulous care in preoperative preparation by utilization of decompression, blood replacement and chemo-therapeutic agents are merely an adjunct to surgery and indeed their exact value still continues to be debatable. Extirpation of colonic carcinoma may now be done in single or multiple stages with an increasingly low mortality and an assurance of a more satisfactory prognosis than have carcinoma elsewhere in the gastro-intestinal tract.

9:50 to
10:35 INTERMISSION TO VIEW EXHIBITS

10:35 "Dermatitis Medicamentosa"

FRANCIS E. SENEAR, M.D., Chicago, Illinois

Professor and Head of the Department of Dermatology, University of Illinois College of Medicine.

Eruptions due to the ingestion of drugs have assumed added importance as the introduction of various new synthetic drugs in recent years has caused an increase in the incidence of such eruptions. Certain drugs produce characteristic pictures, and in such instances the diagnosis is easily established. In the vast majority of cases, however, these eruptions simulate a variety of skin or mucous membrane disorders, and only the alert observer is apt to suspect the medicinal origin of these eruptions. Although polymorphous in appearance, the usual type is urticarial or eczematous, but there are certain characteristics of such drug eruptions which lead to correct diagnosis.

11:00 "Premature Separation of Placenta"

BAYARD CARTER, M.D., Durham, North Carolina

Professor of Obstetrics and Gynecology, Duke University, School of Medicine.

A review of *partial* and *complete* separation of the placenta will be presented. The relationship between detachment of the placenta and multi-parity and hypertensive cardiovascular renal disease will be stressed. The vaginal delivery of patients with premature detachment of the placenta will be emphasized. A series of autopsy reports in slides will be shown to substantiate the claim that delivery of the patient is not the only hazard. (The talk will be given with slides.)

11:25 End of First General Assembly

INTERMISSION TO VIEW EXHIBITS

PROGRAM OF SECTIONS

Wednesday Noon

September 25, 12:00 to 1:30 p.m. (luncheons)

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Parlors G-H-I, Fifth Floor, Book-Cadillac

Chairman: EDMOND L. COOPER, M.D., Detroit
Co-Chairman: A. J. CORTOPASSI, M.D., Saginaw
Secretary: RALPH GILBERT, M.D., Grand Rapids
Co-Secretary: JAMES MAXWELL, M.D., Ann Arbor

OTOLARYNGOLOGICAL PROGRAM
"Paralysis of the Larynx"

LOUIS H. CLERF, M.D., Philadelphia, Pennsylvania

Paralysis, rarely produced by a laryngeal lesion may appear as an early manifestation of a local or systemic disease. Its recognition, a laryngological problem, often requires medical consultation to determine its significance and treatment. Causes will be discussed, the mechanism of its production will be shown by animated drawings and therapeutic procedures will be presented.

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SECTION ON DERMATOLOGY AND SYPHILOLOGY

Washington Room, Fifth Floor, Book-Cadillac

Chairman: KENNETH MOORE, M.D., Flint
Secretary: RUTH HERRICK, M.D., Grand Rapids

Nineteen Discussion Conferences (Quiz Periods)

All Meetings will be held in the Book-Cadillac Hotel, Detroit

Nineteen Discussion Conferences each with a different chairman—a leader of outstanding ability in his field—will be held Wednesday, Thursday and Friday afternoons, immediately following the end of the general assembly program for the day. Here is your chance to ask questions of the lecturers and to hear discussed medical matters of value to you in your daily practice.

Wednesday, September 25, 1946— 4:15 to 5:15 p.m.

MEDICINE
English Room
Leader
Douglas Donald, M.D.
Detroit
Guest Conferees
Edgar V. Allen, M.D.
Rochester, Minn.
Francis M. Rackemann, M.D.
Boston, Mass.

GENERAL PRACTICE
Founders Room
Leader
Wm. S. Reveno, M.D.
Detroit
Guest Conferee
S. Allen Wilkinson, M.D.
Boston, Mass.

SURGERY
Grand Ballroom
Leader
F. A. Coller, M.D.
Ann Arbor
Guest Conferee
Fred W. Rankin, M.D.
Lexington, Ky.

OTOLARYNGOLOGY
Parlor I
Leader
J. Milton Robb, M.D.
Detroit
Guest Conferee
Louis H. Clerf, M.D.
Philadelphia, Pa.

OBSTETRICS
Parlor G-H
Leader
Norman F. Miller, M.D.
Ann Arbor
Guest Conferee
Bayard Carter, M. D.
Durham, N. Car.

DERMATOLOGY
Parlor K
Leader
A. C. Curtis, M.D.
Ann Arbor
Guest Conferee
Francis E. Senear, M.D.
Chicago, Ill.

RADIOLOGY
Parlor J
Leader
E. R. Witwer, M.D.
Detroit
Guest Conferee
Leo G. Rigler, M.D.
Minneapolis, Minn.

Thursday, September 26, 1946— 4:15 to 5:15 p.m.

MEDICINE
English Room
Leader
H. H. Riecker, M.D.
Ann Arbor
Guest Conferee
Arthur H. Ruggles, M.D.
Providence, R. I.

GENERAL PRACTICE
Washington Room
Leader
Carl B. Beeman, M.D.
Grand Rapids
Guest Conferee
Francis D. Murphy, M.D.
Milwaukee, Wis.

SURGERY
Grand Ballroom
Leader
Grover C. Penberthy, M.D.
Detroit
Guest Conferees
Richard B. Cattell, M.D.
Boston, Mass.
George Crile, Jr., M.D.
Cleveland, O.

OPHTHALMOLOGY
Parlor K
Leader
Parker Heath, M.D.
Detroit
Guest Conferees
Edmund B. Spaeth, M.D.
Philadelphia, Pa.

OBSTETRICS
Parlor G-H
Leader
H. A. Miller, M.D.
Lansing
Guest Conferee
Nicholoson B. Eastman, M.D.
Baltimore, Md.

ANESTHESIA
Parlor I
Leader
Joseph De Pree
Grand Rapids
Guest Conferee
Ralph T. Knight, M.D.
Minneapolis, Minn.
I. B. Taylor, M.D.
Detroit, Mich.

PEDIATRICS
Parlor J
Leader
John L. Law, M.D.
Detroit
Guest Conferee
Allan M. Butler, M.D.
Boston, Mass.

Friday, September 27, 1946— 4:15 to 5:15 p.m.

MEDICINE
English Room
Leader
E. D. Spalding, M.D.
Detroit
Guest Conferees
T. Grier Miller, M.D.
Philadelphia, Pa.
E. H. Rynearson, M.D.
Rochester, Minn.
J. W. Conn, M.D.
Ann Arbor

SURGERY
Grand Ballroom
Leader
C. D. Brooks, M.D.
Detroit
Guest Conferees
Roscoe R. Graham, M.D.
Toronto, Ontario
C. W. Mayo, M.D.
Rochester, Minn.

PEDIATRICS
Parlors G-H-I
Leader
W. C. C. Cole, M.D.
Detroit
Guest Conferee
Philip Levine, M.D.
Linden, N. J.

GYNECOLOGY
Washington Room
Leader
H. H. Cummings, M.D.
Ann Arbor
Guest Conferee
Emil Novak, M.D.
Baltimore, Md.

SYPHILOLOGY
Parlor K
Leader
A. E. Schiller, M.D.
Detroit
Guest Conferee
Charles R. Rein, M.D.
New York, N. Y.

REGISTER AT EACH OF THE 82 EXHIBITS YOU'LL FIND SOMETHING NEW

All Members Are Invited to Join in These QUIZ PERIODS with the Guest Essayists.

DERMATOLOGY PROGRAM

"Acute Disseminated Lupus Erythematosus—Its Diagnosis and Treatment"

FRANCIS E. SENEAR, M.D., Chicago, Illinois.

In recent years the acute and subacute types of disseminated lupus erythematosus have attracted increasing attention. This has been due largely to the interest exhibited by specialists in other fields who have recognized that the skin manifestations constitute the external evidence of a variety of systemic involvements. The relationship of lupus erythematosus acutus to the Libman-Sacks syndrome has been extensively discussed. Likewise the question of a common factor in dermatomyositis, periarteritis nodosa, acute lupus erythematosus and scleroderma, and the transition types of cases in this group of systemic diseases with cutaneous manifestations have brought new diagnostic problems to the dermatologist. Because of the poor prognosis in the acute type of lupus erythematosus a wide variety of therapeutic agents have been employed, with inconstant results.

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SECTION ON RADIOLOGY, PATHOLOGY AND ANESTHESIA

Founders Room, Fifth Floor, Book-Cadillac

Chairman: H. J. VAN BELOIS, M.D., Grand Rapids
Secretary: S. E. GOULD, M.D., Eloise
Secretary: E. R. WITWER, M.D., Detroit

RADIOLOGY PROGRAM

"Cholangiography and Biliary Regurgitation"

LEO G. RIGLER, M.D., Minneapolis, Minnesota

Roentgen studies of the biliary tract were made after the injection of diodrast into the common duct through a drainage tube placed there during surgery. In certain cases, especially when some obstruction of the common duct was present, distinct visualization of the kidney pelvis was observed following this procedure.

Experimental studies confirmed the hypothesis that actual regurgitation of the contents of the bile ducts into the blood stream can occur. Cholangiography thus is not without danger particularly if pressure is applied.

WEDNESDAY AFTERNOON
September 25, 1946

Second General Assembly

Grand Ballroom—Book-Cadillac Hotel

J. DUANE MILLER, M.D., *Presiding*

L. FERNALD FOSTER, M.D., and KENNETH MOORE, M.D., *Secretaries*

P. M.

1:40 **"New Concepts of the Causes of Asthma"**

FRANCIS M. RACKEMANN, M.D., Boston, Massachusetts

Lecturer in Medicine, Harvard Medical School.

Asthma which begins before age thirty is due to allergy unless proved otherwise. Asthma which begins after age forty is not due to allergy unless proved otherwise.

In the first group it is the clinical history which is of crucial importance. In the second the concept of "depletion" is good. Depletion may be psychic or somatic or both. Somatic Depletion includes infections of the bronchi (asthmatic bronchitis). On the whole, infections are not very important.

The cause of asthma in older people is a physiologic disturbance not clearly understood, but possibly concerned with changes in adrenalin secretion.

Selye's concept of the "alarm reaction" is interesting and pertinent. Malnutrition, occasionally the result of treatment, causes depletion and may establish a vicious circle hard to interrupt.

Lesions of the sinuses—"polypoid sinusitis"—which are so characteristic are a result and not a cause of the primary process. Emphysema may be primary and primary emphysema is serious; it simulates intrinsic asthma closely.

2:05 **"The Early Diagnosis of Cancer of the Lung"**

LEO G. RIGLER, M.D., Minneapolis, Minnesota.

Professor and Chief of the Department of Radiology, University of Minnesota.

The increased frequency of carcinoma of the lung together with the development of surgical methods which permit a cure in some cases emphasizes the importance of early diagnosis. Roentgen examination is the surest means of recognition in the early stages. Every individual past the age of forty with the most minimal symptoms should be given the benefit of immediate x-ray examination. During the course of routine x-ray surveys many unsuspected tumors of the lung which are entirely symptomless will also be found. On the first roentgen examination the diagnosis cannot usually be established but further studies in various positions and particularly the use of body section roentgenography and bronchography will make the diagnosis more certain.

The roentgen findings in the early stages will be reviewed and the importance of obstructive emphysema as an early sign of carcinoma of the lung will be elucidated. A series of cases with minimal symptoms in which the diagnosis could be made by x-ray examination will be reported.

2:30 to 3:15 **INTERMISSION TO VIEW EXHIBITS**

3:15 **"The Clinical Significance of Hoarseness and Wheezing Respiration"**

LOUIS H. CLERF, M.D., Philadelphia, Pennsylvania

Professor of Laryngology and Broncho-Esophagology, Jefferson Medical College.

Appreciation of the mechanism of production of symptoms and their correct interpretation are necessary in clinical diagnosis. Certain symptoms are readily recognized. Their significance may not be so obvious.

Hoarseness, an evidence of laryngeal dysfunction may be caused by local disease or may be a local manifestation of a systemic disorder. This can be determined only by laryngeal examination and by certain general studies.

Wheezing respiration is indicative of partial obstruction of the tracheobronchial tree and may be produced by one of a host of conditions. Its mechanism and the diagnostic procedures necessary to determine its cause will be discussed.

3:40 **"Diseases of the Liver and Jaundice"**

S. ALLEN WILKINSON, M.D., Boston, Massachusetts

Member of Staff, Department of Gastro-Enterology, Lahey Clinic.

The first part of this paper includes a résumé of the various important functions of the liver with a brief description of the function tests which may apply to each function. The relative importance of these tests and their use are described. The second part comprises a summary of the more common liver diseases, particularly those associated with jaundice. The differential diagnosis is a part of this discussion. Methods of treatment are discussed with particular reference to those diseases in which jaundice is a factor.

4:15 **SEVEN DISCUSSION CONFERENCES WITH GUEST ESSAYISTS**

(see page 1082)

5:15 **End of Second General Assembly**



Belle Isle

WEDNESDAY EVENING
September 25, 1946

Third General Assembly

Grand Ballroom, Book-Cadillac Hotel

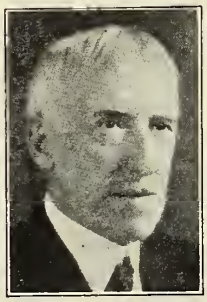
R. S. Morrish, M.D., *Presiding*
L. Fernald Foster, M.D., *Secretary*

P. M.
8:30 OFFICERS' NIGHT—PUBLIC MEETING

1. Call to order by President R. S. Morrish, M.D., Flint
2. Announcements and Reports of the House of Delegates by Secretary L. Fernald Foster, M.D., Bay City
3. President's Annual Address—R. S. Morrish, M.D., Flint
4. Induction of Wm. A. Hyland, M.D., Grand Rapids, into office as President of the Michigan State Medical Society by the Retiring President
   Response
5. Introductions by the Retiring President of the President-Elect and other newly elected officers and of the Chairman of The Council of the State Society
6. Presentation of Scroll and Past-President's Key to Doctor Morrish by the Chairman of The Council, E. F. Sladek, M.D., Traverse City

9:00 7. The Andrew P. Biddle Oration
"Industrial Research and Medicine"
C. F. Kettering, *Detroit, Vice President of General Motors Corporation in Charge of Research*

8. Presentation of Biddle Oration Scroll



The late Andrew P. Biddle, M.D.
Patron of Postgraduate Medical Education
(Deceased August 2, 1944)

9. End of Third General Assembly

THURSDAY MORNING
September 26, 1946

Fourth General Assembly

Grand Ballroom, Book-Cadillac Hotel

W. E. Barstow, M.D., *Presiding*
L. Fernald Foster, M.D. and H. J. Van Belois, M.D., *Secretaries*

A. M.
9:00 "Present Day Management of Ulcerative Colitis"

Richard B. Cattell, M.D., Boston, Massachusetts

Surgeon to Lahey Clinic, New England Deaconess and New England Baptist Hospitals.

Ulcerative colitis is a serious disease chiefly affecting young adults. It occurs in both an acute and chronic form and is marked by exacerbation and remission of symptoms. The process usually begins in the rectum or sigmoid and usually spreads to involve all of the large intestine as well as the ileum in some cases. No specific etiology can be proved, but there are many factors which contribute to its development and spread. It is the second most frequent organic lesion involving the intestine and occurs in a ratio of 1 to 4 for cancer of the large intestine. The disease is manifested by bowel symptoms consisting of diarrhea with the passage of blood, pus and mucus, with general symtoms of fever, weight loss, prostration and weakness.

A combined medical and surgical treatment is necessary to care adequately for these patients. Medical treatment is not specific but supportive and gives satisfactory results in one-half of the cases. Complications are common and these demand surgical intervention. Ileostomy is the operation of choice in most patients and may suffice to produce a remission. If not, subtotal or total colectomy will be necessary. An improved management of the ileostomy permits satisfactory rehabilitation and restores these patients to an active, social and good economic status.

9:25 "The Development and Use of the Psychiatric Out-patient Department"

Arthur H. Ruggles, M.D., Providence, Rhode Island

Superintendent, Butler Hospital, Providence, Rhode Island.

Neuropsychiatric Out-patient Departments have for many years provided a service which has been valuable in the early treatment of neuroses and mild psychoses, thus often preventing more serious disturbances and chronicity. With the return of World War II veterans, the community importance of the Out-patient Department becomes greater. In our experience Out-patient departments should be set up with fulltime, adequately compensated psychiatrists, psychologists and social workers. Each Clinic should make its own physical and neurological examinations, and be equipped with extensive laboratory resources and have available consulting specialists, for adequate determination of the relationships between soma and psyche. Complete records of the findings must be kept for critical study of results and of future needs. An average of eight hours of history taking and examination precede active treatment in our Clinic.

The cost of such adequate Out-patient treatment has never been accurately determined, and we hope to be able to present facts and figures indicating what such adequate neuropsychiatric out-patient treatment does cost.

9:50 to
10:35 INTERMISSION TO VIEW EXHIBITS

10:35 "Hypertensive Heart Disease"

Francis D. Murphy, M.D., Milwaukee, Wisconsin

Director, Department of Medicine, Professor of Medicine, Marquette University, School of Medicine

Hypertension becomes associated with certain degenerative diseases of the essential organs of the body. The kidneys, the heart and the brain are usually involved

to some extent in this process. However, hypertensive heart disease is the commonest disorder. It is the result of the combined action of hypertension and arteriosclerosis of the coronary arteries. Myocardial insufficiency results from a disproportion between increased muscle mass and its blood supply. Auricular fibrillation or flutter, coronary insufficiency, angina pectoris and heart failure are common clinical manifestations of hypertensive heart disease. Treatment is discussed.

11:00 **"Parenteral Fluid Therapy"**

ALLAN M. BUTLER, M.D., Boston, Massachusetts
Professor of Pediatrics, Harvard Medical School

The paper discusses:
1. The parenteral provision of the basic daily requirements of glucose, protein, electrolytes and water to individuals who cannot ingest fluids orally; and 2. the loss of electrolytes, fluid and nitrogen incident to dehydration in addition to starvation. It emphasizes particularly the magnitude and significance of potassium losses. A simple manner of parenterally providing these basic daily requirements and replacing these losses of dehydration, including potassium, is described.

11:25 End of Fourth General Assembly
INTERMISSION TO VIEW THE EXHIBIT

PROGRAM OF SECTIONS

Thursday Noon

September 26, 1946—12:00 to 1:30 p.m. (Luncheons)

SECTION ON OPHTHALMOLOGY AND OTOLARNGOLOGY

Parlor G-H-I, Fifth Floor, Book-Cadillac Hotel

Chairman: EDMOND L. COOPER, M.D., Detroit
Co-Chairman: A. J. CORTOPASSI, M.D., Saginaw
Secretary: RALPH GILBERT, M.D., Grand Rapids
Co-Secretary: JAMES MAXWELL, M.D., Ann Arbor

OPHTHALMOLOGICAL PROGRAM

"Vertical Component in Lateral Concomitant Strabismus"

EDMUND B. SPAETH, M.D., Philadelphia, Pennsylvania

With the exception of cases of pure alternating strabismus a very large number of other types and cases of so-called concomitant strabismus are strongly modified, if not caused, by disturbances in the vertical acting muscles. This is seen clinically, and the situation (these disturbances in the vertical) is consistent with the basic etiology of strabismus. Cases will be presented and suggestions outlined for the basic treatment.

* * *

SECTION ON GENERAL PRACTICE

Grand Ballroom, Book-Cadillac Hotel

Chairman: W. B. HARM, M.D., Detroit
Secretary: LUTHER W. DAY, M.D., Jonesville

"Acute Glomerular Nephritis"

FRANCIS D. MURPHY, M.D., Milwaukee, Wisconsin

Mild forms of acute nephritis often pass unrecognized and untreated and are frequently those which progress insidiously into chronic nephritis from which the patient seldom recovers. The classic text books picture of acute nephritis is often lacking and the mild forms are more common.

Acute nephritis follows one of several courses:
(a) the patient may die in the acute attack
(b) subacute or chronic nephritis may develop
(c) complete healing may occur.

The transitional period between acute nephritis which is apparently healed but not really so and the subsequent chronic nephritis is taken up. Treatment of the acute phase and methods of protecting the patient from chronic nephritis is discussed.

SECTION ON SURGERY

Washington Room—Book-Cadillac Hotel

Chairman: LOUIS J. MORAND, M.D., Detroit
Secretary: JOHN C. FOSHEE, M.D., Grand Rapids

"Surgical Diseases of the Pancreas and Lower Biliary Tract"

GEORGE CRILE, JR., M.D., Cleveland, Ohio

A study of six patients with diffuse calcifications of the pancreas, associated with obstruction of the pancreatic ducts by calculi, is reported. This is a rare disease causing severe symptoms, and sometimes causing morphine addiction in patients with uncontrollable pain.

The present status of surgical treatment of carcinomas of the common bile duct, Ampulla of Vater, and head of the pancreas is discussed, and the problem of post-cholecystectomy biliary dyskinesia is reviewed.

SECTION ON RADIOLOGY, PATHOLOGY AND ANESTHESIA

Parlor J—Fifth Floor, Book-Cadillac Hotel

Chairman: H. J. VAN BELOIS, M.D., Grand Rapids
Secretary: S. E. GOULD, M.D., Eloise
Secretary: E. R. WITWER, M.D., Detroit

ANESTHESIA PROGRAM

"Discussion on Spinal Anesthesia"

IVAN B. TAYLOR, M.D., Detroit, Michigan
Professor of Anesthesiology, Wayne University College of Medicine

There have been many conflicting opinions expressed on spinal anesthesia. Many of these have been made by physicians whose only part in the administration of the anesthesia is the injection of the drug into the subarachnoid space. For proper observation and care of this type of anesthesia the anesthesiologist should care for the patient during the operation, relieve any pain, and supplement the anesthesia when necessary. Careful watch of the circulation, respiration and level of anesthesia are necessary. The results of the author's experience after ten years' use of spinal anesthesia will be presented.

THURSDAY AFTERNOON

September 26, 1946

Fifth General Assembly

Grand Ballroom—Book-Cadillac Hotel

W. H. HURON, M.D., *Presiding*

L. FERNALD FOSTER, M.D. and D. J. BARNES, M.D., *Secretaries*

P. M.
1:40 **"The Present Status of Treatment of Disease of the Thyroid"**

GEORGE CRILE, JR., M.D., Cleveland, Ohio
Member, Surgical Staff, Cleveland Clinic Foundation

Recent advances in the treatment of diffuse goiter with hyperthyroidism promise to obviate the necessity of surgery in this field. The excellent results obtained by the newer non-toxic drugs of the thiouracil series, such as propyl thiouracil, will probably return the treatment of this type of thyroid disease to the field of Medicine.

Adenomatous goiter and carcinoma of the thyroid however remain surgical problems. Even in adenomatous goiter with hyperthyroidism, when old age or complicating disease increases the hazard of thyroidectomy, consideration should be given to more conservative methods of treatment.

2:05 "Present Developments in Combined Anesthesia"

RALPH T. KNIGHT, M.D., Minneapolis, Minnesota

Clinical Professor and Director, Division of Anesthesiology, University of Minnesota Medical School

Today's goal in anesthesiology is to maintain practically normal physiology with minimum depression of the central nervous system while providing insensibility and the best possible conditions for the surgeon's work. Advantage is taken of the best quality in each available anesthetic and method, using together as many as are advantageous. An example is the use of curare for muscular relaxation, sodium pentothal for unconsciousness, procaine as an analgesic and nitrous oxide with abundant oxygen to aid in unconsciousness and analgesia. Together they provide almost ideal and almost universally applicable anesthesia with a minimum dose of each. This illustrates the aid which can be given to the problems of the patient's physician and surgeon by the anesthesiologist.

2:30 to
3:15 INTERMISSION TO VIEW EXHIBITS

3:15 "Ocular Fundus: Its Value in Diagnosis and in Prognosis"

EDMUND B. SPAETH, M.D., Philadelphia, Pennsylvania

Professor of Ophthalmology and Vice Dean for Ophthalmology, Graduate School of Medicine, University of Pennsylvania

The fundus of the eyeball is one of the most accessible of the organs of the human body for examination and for interpretation of the findings seen. In spite of this examinations of the fundus oculi are neglected too frequently by the medical men. Special training as an ophthalmologist is not a requisite for the utilization of this valuable means for diagnosis. The presentation will attempt confirmation of that statement by presenting and discussing some of the more common changes seen therein.

3:40 "Episiotomy"

NICHOLOSON J. EASTMAN, M.D., Baltimore, Maryland

Professor of Obstetrics, Johns Hopkins University

A series of approximately 1,000 median episiotomies and 1,500 lateral episiotomies have been reviewed and on the basis of this material the relative advantages and disadvantages of the two procedures are discussed. In addition, the technical details of episiotomy in general are reviewed.

4:15 SEVEN DISCUSSION CONFERENCES WITH GUEST ESSAYISTS (see page 1082)

5:15 End of Fifth General Assembly

THURSDAY EVENING
September 26, 1946

State Society Night

Grand Ballroom—Book-Cadillac Hotel

10:00 P.M. Dancing for MSMS Members and their ladies

Admission by Card Only.

FRIDAY MORNING
September 27, 1946

Sixth General Assembly

Grand Ballroom—Book-Cadillac Hotel

R. C. POCHERT, M.D., *Presiding*

L. FERNALD FOSTER, M.D., and A. J. CORTOPASSI, M.D.
Secretaries

A. M.
9:00 "Significance and Treatment of Uterine Bleeding at Various Age Periods"

EMIL NOVAK, M.D., Baltimore, Maryland

Assistant Professor of Gynecology, Johns Hopkins University

Abnormal bleeding during reproductive life may be due to definite structural disease, such as cancer, to purely functional disorders, or to a combination of the two. It is the functional type to which chief attention is devoted in this paper, with a consideration of the mechanisms involved; its significance in (1) puberty and early adolescence, (2) during the reproductive epoch and (3) in the premenopausal and menopausal years; and the different plans of management at these various age periods.

9:25 "Results from the Management of Peptic Ulcer"

T. GRIER MILLER, M.D., Philadelphia, Pennsylvania

Professor of Clinical Medicine, University of Pennsylvania Medical School

An evaluation of various types of therapy in simple and complicated peptic ulcer on the basis of follow-up results over a ten-year period. The importance of psychogenic factors, of adequate nutrition and of thorough and intelligent co-operation on the part of the patient will be emphasized. The place of prompt feeding in the bleeding ulcer and of surgery in the refractory and complicated cases will be discussed.

9:50 to
10:35 INTERMISSION TO VIEW EXHIBITS

10:35 "Treatment of H. Influenzae Meningitis"

H. E. ALEXANDER, M.D., New York, New York

Assistant Professor of Pediatrics, College of Physicians and Surgeons, Columbia University

A comparison of the efficiency of sulfadiazine, type specific rabbit serum and streptomycin as protective agents against mouse infections with type b H. influenzae is shown in Table I. Our experience with these agents in treatment of H. influenzae meningitis shows the importance of use of objective criteria in determining severity of infection.

The results suggest that sulfadiazine will cure the mild infections when applied early in the course, streptomycin will bring about prompt recovery when the infection is of average severity, antiserum and sulfadiazine have been effective in most of the severe infections. In the most severe cases our results suggest that all three agents should be used initially.

TABLE I. SUMMARY OF PROTECTIVE POWER OF THERAPEUTIC AGENTS IN MICE

Therapeutic Agent	No. of MLD	Protection No. of Mice
Sulfanilamide	500	120
Sulfadiazine	9,250	280
Serum	28,875	625
Sulfadiazine and Serum	850,000	270
Streptomycin	1 to 100 Million	192

A. M.
11:00 "Abdominal Emergencies in General Practice"

ROSCOE R. GRAHAM, M.D., Toronto, Ontario, Canada

Associate Professor of Surgery, University of Toronto

It is most important to differentiate extra peritoneal lesions which may simulate intraperitoneal disease, in all cases where a patient suffers a sudden intraperitoneal disease. Acute intraperitoneal lesions are the result of trauma, inflammation or neoplasm. The acute emergencies resulting from trauma have to do with soft tissue damage, usually accompanied by hemorrhage. Those related to acute inflammatory lesions most commonly occur as the result of an acute process in pelvic structures, in the appendix, biliary tract, or as the result of a perforated duodenal ulcer. The acceptance of a trinity—association of pain and tenderness, one point of maximum tenderness, and distress aggravated by change of position, is the sheet-anchor in differentiating intra from extraperitoneal disease.

11:25 End of Sixth General Assembly

INTERMISSION TO VIEW EXHIBITS

— PROGRAM OF SECTIONS —

Friday Noon

September 27, 12:00 to 1:30 p.m. (Luncheons)

SECTION ON PEDIATRICS

Parlor G-H-I, Fifth Floor, Book-Cadillac Hotel

Chairman: DONALD J. BARNES, M.D., Detroit
Secretary: Mark F. OSTERLIN, M.D., Traverse City

"The Basis for the Specific Therapy of Erythroblastosis Fetalis"

PHILIP LEVINE, M.D., Linden, New Jersey

Emphasis will be placed on the necessity of prevention of erythroblastosis by the selective transfusion of all Rh negative girls or women exclusively with Rh negative blood. The same precaution is essential even when blood is to be injected intramuscularly. The treatment of erythroblastotic infants with transfusion with Rh negative blood will be discussed, and also the use of exsanguination transfusion in severe cases. The several tests to detect sensitization in mothers prior to delivery will be reviewed. Reference will be made to recent claims on the varying clinical condition in the erythroblastotic infant depending upon the presence of blocking antibodies or agglutinins will be reviewed. It is probable that sufficiently large quantities of diagnotic human anti-Rh sera will soon be made available.

* * *

SECTION ON GYNECOLOGY AND OBSTETRICS

Washington Room—Book-Cadillac Hotel

Chairman: HAROLD W. WILEY, M.D., Lansing
Secretary: CLEARY N. SWANSON, M.D., Detroit

"Functioning Tumors of the Ovary"
EMIL NOVAK, M.D., Baltimore, Maryland

There are certain so-called dysotogenetic tumors, derived from cells dating back to the early stages of ovarian development, which have the capacity of producing, on the one hand the female sex hormone, on the other hand the masculine hormone. To the former group belong the granulosa cell tumor and the coma; to the latter the arrhenoblastoma and adrenal tumors of the ovary. A discussion of their histogenesis, their histological characteristics and gradations, their clinical and biological effects, treatment and prognosis. Lantern slide demonstration.

* * *

SECTION ON MEDICINE

Founders Room—Book-Cadillac Hotel

Chairman: JOHN D. LITTIG, M.D., Kalamazoo
Secretary: FRANKLIN W. BASKE, M.D., Flint

"Functional Hyperinsulinism: A Common and Well Defined Clinical Entity Amenable to Medical Management"

JEROME W. CONN, M.D., Ann Arbor, Michigan
Associate Professor of Internal Medicine, University of Michigan School of Medicine

Spontaneous hypoglycemia is a relatively frequent cause of symptoms in man. A diagnostic consciousness of this fact is the first step in the recognition of these cases. Although there are many possible causes for periodic spontaneous hypoglycemia, the vast majority of all of the cases fall into the group called functional hyperinsulinism.

The clinical history and the laboratory findings in this group are sufficiently characteristic to allow easy differentiation from other types of spontaneous hypoglycemia. The importance of recognizing functional hyperinsulinism for what it is cannot be overemphasized because:

1. Exploration of the pancreas is not indicated since the condition is not produced by an islet cell tumor.
2. It responds promptly to dietary management.

The pathological physiology responsible for the production of functional hyperinsulinism, and the rational for the use of the high protein, low carbohydrate diet for its control will be discussed.

FRIDAY AFTERNOON
September 27, 1946

Seventh General Assembly

Grand Ballroom—Book-Cadillac Hotel

FRED H. DRUMMOND, M.D., *Presiding*
L. FERNALD FOSTER, M.D. and E. L. COOPER, M.D., *Secretaries*

P. M.
1:40 **"Recent Advances in the Serodiagnosis of Syphilis"**

CHARLES R. REIN, M.D., New York, New York
Consultant in Serology, Army Medical School

The purpose of this paper is to describe new developments for improvement of serodiagnostic tests for syphilis, which include preserved sheep cells, preserved lyophilized complement, cardiolipin antigens and quantitative complement fixation tests. The use of a new vacuum tube for collecting blood specimens and the value of merthiolate for preserving serum are discussed. The limitations of serodiagnostic tests with special reference to false negative and false positive reactions will be discussed, including an evaluation of new "verification" tests devised to differentiate between syphilitic and non-syphilic reactions. The use of quantitative tests in predicting clinical relapse and in distinguishing between serologic relapse and re-infection are evaluated.

P. M.
2:05 **"Importance of the Rh Factor in Clinical Medicine"**

PHILIP LEVINE, M.D., Linden, New Jersey
Director, Ortho Research Foundation

The importance of the Rh factor in prevention of transfusion accidents as well as in the diagnosis of erythroblastosis will be summarized. Emphasis will be placed on the prevention of isoimmunization by performance of Rh testing in all young girls or women prior to transfusion or intramuscular injection of blood. A recommendation will be made for routine Rh testing in all prenatal cases (but not premarital), perhaps, on a state-wide basis. It is also desirable for the several hospitals in a community to pool their resources for the organization of central laboratories in charge of a worker specially trained in Rh work. Such a program can be carried out in conjunction with a central blood bank. In this manner it is hoped that sufficiently large quantities of human anti Rh sera will become available.

2:30 to
3:15 **FINAL INTERMISSION TO VIEW EXHIBITS**

3:15 **"Clinical Disturbances of the Endocrine Glands"**

E. H. RYNEARSON, M.D., Rochester, Minnesota
Associate Professor of Medicine, Mayo Foundation, University of Minnesota

An effort will be made to separate the clinical disturbances of the endocrine glands, which are very real, from the multitude of conditions which commonly and probably erroneously are attributed to these glands. There is a great discrepancy, for example, between the use of pituitary extracts in laboratory animals and the use of more purified extracts in human beings. There also is quite a distinction between the use of endocrine products and their abuse.

In brief, an effort will be made to separate endocrinology from "endocriminology."

P. M.
3:40 **"Operative Procedures for Carcinoma of the Rectum"**

CHARLES W. MAYO, M.D., Rochester, Minnesota
Associate Professor of Surgery, Mayo Foundation, University of Minnesota

The type of operation selected for malignant lesions of the rectum is dependent on the size, type, location and degree of fixation of the lesion, as well as on the age and general condition of the patient. Selection should be individualized. Surgical procedures vary from simple to complicated ones. Sacrifice of the rectum when unnecessary is tragic; preservation of the rectum when it should be sacrificed is tragic. In selected cases, the rectum can be removed and the sigmoid brought down with preservation of the sphincter. For low rectal lesions, the one-stage combined abdominoperineal resection usually is the operation of choice. Abdominal colostomy can be made to give minimum discomfort and not hamper normal living and activity of the patient.

4:15 **FIVE DISCUSSION CONFERENCES WITH GUEST ESSAYISTS** (see page 1082)

5:15 End of Seventh General Assembly

END OF SCIENTIFIC ASSEMBLY

Have You Made Your Hotel Reservation?



DETROIT SESSION

Michigan State Medical Society

September 25-26-27, 1946

The list of hotels and the reservation blank below are for your convenience in making your hotel reservation in Detroit. Please send your application not to the Hotel directly but to E. C. Texter, M.D., Chairman of MSMS Housing Committee, 1005 Stroh Bldg., Detroit 26. Mailing your application now will be of material assistance in securing hotel accommodations.

HOTELS AND RESERVATIONS PRICES

HOTEL	SINGLE	DOUBLE BED	TWIN BEDS
Book Cadillac Hotel	$3.50 to $7.00	$5.00 to $9.00	$6.00 to $9.00
Statler	3.00 to $6.50	5.00 to $8.00	5.50 to $9.00
Detroit Leland	3.00 to $5.00	5.00 to $7.00	5.00 to $7.00
Fort Shelby	2.50 to $5.00	4.00 to $7.00	5.00 to $7.00
Tuller	2.50 to $4.00	4.00 to $5.00	5.00 to $7.00
Barlum	2.50 to $4.00	4.00 to $5.50	5.50 to $6.00
Wolverine	2.50 to $4.00	3.50 to $5.00	5.00 to $8.00

Very Few Singles Are Available

E. C. Texter, M.D., Chairman
MSMS Housing Committee
1005 Stroh Building
Detroit 26, Michigan

Please make hotel reservation(s) as indicated below:

Hotel .....(1st choice)
Hotel .....(2nd choice)
Hotel .....(3rd choice)

.....Single Room(s)
.....Double Room(s) for.....persons
.....Twin Bedded Room(s) for.....persons

Arriving September.....hour.....A.M. .....P.M.
Leaving September.....hour.....A.M. .....P.M.

(Names and addresses of all applicants including person making reservation).

Name	Address	City	State

Date..... Signature .....

Address..... City.....

Say you saw it in the Journal of the Michigan State Medical Society

— Technical Exhibits —

Abbott Laboratories **Booth No. 35**
North Chicago, Illinois

Mr. E. B. Webb and other Abbott representatives will be glad to discuss with you the war-born and newer products on display.
Amethone, the new urinary antispasmodic, Thiouracil (Abbott), for the preoperative preparation of Thyrotoxic patients, Tridione, of value in Epilepsy, and other new items merit your attention.

SO! BE SURE TO VISIT BOOTH 35

A. S. Aloe Company **Booth No. 15**
St. Louis, Missouri

The A. S. Aloe Company in Booth 15, is exhibiting a small cross section of its complete line of surgical, physio-therapy and laboratory equipment. Our representative, Mr. T. T. Boufford, is in charge of the booth.

Ames Company, Inc. **Booth No. 22**
Elkhart, Indiana

Ames Company, Inc. and its Reidel—de Haen Division cordially invite you to Booth No. 22 where modern test methods for urine-sugar, albumin, acetone and occult blood will be demonstrated; and our representatives will be glad to discuss the wide therapeutic advantages of the original hydro-choleretic, Decholin.

The Baker Laboratories **Booth No. 9**
Cleveland, Ohio

In the Baker exhibit you will see a line of infant foods that incorporates the newer trends and more recent thinking in infant nutrition. Both Baker's Modified Milk and Melcose are complete milk formulas, and completely prepared. Melodex (maltose and dextrin) is an economical carbohydrate in dry form and is made especially for use in preparing evaporated or fresh milk formulas in the home.

Bard-Parker Company, Inc. **Booth No. 31**
Danbury, Connecticut

Products to be displayed: Bard-Parker Rib-Back surgical blades; Surgical knife handles; Long handles for deep surgery; Bard-Parker Germicide; Instrument containers; Transfer forceps; Hematological case for obtaining bedside blood samples.

Barry Allergy Laboratories, Inc. **Booth No. 55**
Detroit, Michigan

Welcome Again MSMS to our Exhibit. We are proud to present new items in Sterile Injectable Solutions in Ampuls and Vials. New diagnostic scratch and intra-dermal sets with treatment service. Special allergists supplies. Scientifically organized Allergy Service. Hay Fever and Poison Ivy Sumac Sets. Pollen-Paks. Refined Protiens and Allergenic Extracts.

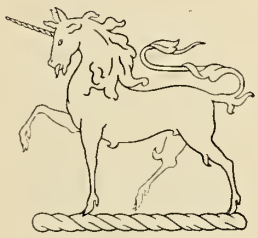
Becton, Dickinson & Company **Booth No. 34**
Ruthterford, New Jersey

The complete line of Vacutainer equipment, including all sizes of tubes available, will be the leading feature at Becton, Dickinson's booth. Their representatives, Mr. C. H. Yocum, Mr. V. R. Littlefield, and Mr. T. W. Starling, will demonstrate this new method of taking blood specimens for all purposes. In addition, hypodermic equipment, including recently developed outfits for continuous caudal and spinal anesthesia, will be displayed.

The Borden Company **Booth No. 32**
New York, New York

Spend a few minutes with Borden at Booth No. 32 . . . refresh your memory on our Prescription Products. Meet the new concentrated Biolac; New Improved Dryco with its formula flexibility; Mull-Soy for your milk-allergic patients; powdered whole milk Klim; the improved milk sugar, Beta Lactose; and the Merrell-Soule Protein and Lactic Acid Milks. Borden men are pleasant men!

Burroughs Wellcome & Co. (U.S.A.) Inc. **Booth No. 26**
New York, New York



BURROUGHS WELLCOME & CO., (U.S.A.) INC., NEW YORK, cordially invite physicians to their exhibit of a representative group of fine pharmaceuticals and chemicals. Of particular interest are GLOBIN INSULIN, a new advance in diabetic control; DIGOXIN, a pure, stable, crystalline glycoside of Digitalis lanata, combining constant, uniform potency with rapidity of action; and "DEXIN" High Dextrin Carbohydrate, the milk modifier in which the non-fermentable portion predominates; and "LUBAFAX" Brand Surgical Lubricant, one of our latest preparations.

Camel Cigarettes **Booth No. 67**
New York, New York

CAMEL Cigarettes will exhibit a large detailed photograph showing the calculated absorption of nicotine from cigarette smoke in the human respiratory tract. Representatives will be on hand to discuss any phase of the physiological effects of smoking.

Cameron Heartometer Company **Booth No. 14**
Chicago, Illinois

THE CAMERON HEARTOMETER COMPANY is showing the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressure. It also furnishes a permanent graphic record of the pulse rate, the nervous functioning of the heart, the myocardial response, as well as the functioning of the valves. The Heartometer clearly reveals heart disturbances in both early and advanced stages and is of great value in checking the progress of medication and treatments.

Cameron Surgical Specialty Company **Booth No. 53**
Chicago, Illinois

CAMERON SURGICAL SPECIALTY COMPANY See the new Cameron Electro-Surgical Units, Flexible Gastroscopes, Coagulair-Sigmoidoscope, Electro-Diagnostosets, Bronchoscopes — Esophagoscopes — Laryngoscopes, Mirrolite, Binocular Prism Loupe, Magniscope and other specialties developed for your postwar diagnosis, treatment and surgery. All products available for prompt delivery.

Carnation Company **Booth No. 39**
Milwaukee, Wisconsin

You are invited to visit the Carnation Company booth, No. 39, where you will see an attractive display presenting some interesting information on the various uses of Carnation Vitamin D Evaporated Milk for infant feeding, child feeding, and general diet pur-

poses. The method by which Carnation Milk is generously fortified with Vitamin D—400 U.S.P. Units per reconstituted quart—will be explained. Valuable literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc. **Booth No. 20**
Summit, New Jersey

Ciba invites you to visit its display at booth No. 20. Among products exhibited will be PRIVINE HCl, an effective, long-acting nasal vasoconstrictor; METANDREN Linguets, the potent androgen, methyltestosterone, for sublingual administration; TRASENTINE, TRASENTINE-PHENOBARBITAL and other products.
Our representatives in attendance will be glad to answer your questions.

Cottrell-Clarke, Inc. **Booth No. 78**
Detroit, Michigan

Davis & Geck, Inc. **Booth No. 61**
Brooklyn, New York

"This One Thing We Do"
D&G Sutures

Davis & Geck, Inc., manufacturer of surgical sutures exclusively, will display a line of sutures and suture-needle combinations applicable to every technique and filling the requirements of every surgical situation. These will consist of D&G Thermo-flex and Claustro-Thermal catgut as well as non-absorbable sutures including D&G Dermalon, Surgilon, Anacap silk, Surgaloy metallic sutures and others. Motion pictures from the Surgical Film Library will be shown in Booth No. 61. Several new subjects will be presented. The company will be represented by Mr. Fred Geck and Mr. Merle Elliott.

DePuy Mfg. Co. **Booth No. 84**
Warsaw, Ind.

Detroit Creamery Company **Booth No. 77**
Detroit, Michigan

National Dairy Sealtest Products Corp.

This year's Sealtest exhibit stresses the development of its field force of inspectors.
National Dairy's red Sealtest symbol is found on milk and other milk products. The complex system of inspection, the detail work and research behind it, are all part of a larger program to perfect and improve milk in whatever form it reaches you, wherever you live.

Doho Chemical Corporation **Booth No. 33**
New York, New York

The Makers of "AURALGAN" are introducing at this Meeting their new sulfa drug preparation "OTOSMOSAN", indicated in the treatment and control of chronic suppurative ears. Our Representatives will be happy to explain, in detail, the workings of these medications.
Also to distribute our latest series of three (3) Anatomico-Pathologic Charts of the Ear, in color, suitable for framing.

Duke Laboratories, Inc. **Booth No. 63**
Stamford, Connecticut

At Booth 63, Duke Laboratories, Inc., will have on display Elastoplast and Mediplast, surgical bandages and dressings, also Aquaphor, the better base for ointments, Nivea Creme, Nivea Skin Oil and Basis Soap —Prescribers' Cosmetics.

Ethicon Suture Laboratories **Booth No. 82**
New Brunswick, New Jersey

Tantalum Surgical Materials: Tantalum sutures with Atraloc needles attached, tantalum plates, foil, wire, hemostasis clips and gauze will be featured. Ethicon consultants will also demonstrate the advantages of new 5-0 and 6-0 Tru-Chromicized sutures.

H. G. Fischer & Co. **Booth No. 83**
Detroit, Michigan

H. G. Fischer & Company, Detroit, will feature the latest in x-ray and medical and surgical electrical equipment. Personnel on hand to greet you will be M. C. Hunt, H. M. Berry, W. C. Elliott, J. N. Griffith, W. V. Scudder, L. H. Wolfe, Paul Garrard and L. F. Fild.

C. B. Fleet Company, Inc. **Booth No. 43**
Lynchburg, Virginia

Phospho-Soda (Fleet) is a highly concentrated and purified, aqueous solution of sodium phosphates. It is non-toxic, rapid but mild in action without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction, and for its thorough eliminating and cleansing action on the upper and lower gut.

General Electric X-Ray Corporation **Booth No. 54**
Detroit, Michigan

Factual discussions with members of our Michigan sales and service organization during the state meeting will aid you in your future apparatus planning. If you are thinking about new and improved x-ray or electro-medical apparatus, our Layout Engineers can help you with detailed plans and specifications.
Possibly an improvement in radiographic end results is indicated. Or you may wish to know how G.E.'s Periodic Inspection and Adjustment Service can help keep your equipment at its maximum operating efficiency. Why not drop in and avail yourself of our wide experience and know-how?

Gerber Products Company **Booth No. 21**
Fremont, Michigan

You are invited to visit Gerber's Baby Foods booth. A qualified infant nutritionist will be in attendance and will be glad to answer questions on Gerber's Baby Cereals, Gerber's Strained Foods and Gerber's Chopped Foods. Samples of Barley Cereal, Cereal Food and Strained Oatmeal will be available.

Hanovia Chemical and Manufacturing Co. **Booth No. 25**
Newark, New Jersey

A complete line of self-lighting ultraviolet quartz lamps will be on display for orificial and general body irradiation. Don't fail to inquire about our germicidal lamps for the destruction of air-borne bacteria. Popular models will be displayed. Courteous and competent representatives will be on hand to greet you.

J. F. Hartz Company **Booth No. 60**
Detroit, Michigan

The J. F. Hartz Company looks forward with great pleasure to the 81st Annual Convention of the MSMS.
It will be our privilege to exhibit there our pharmaceutical products as well as a full line of surgical instruments and equipment.

H. J. Heinz Company **Booth No. 59**
Pittsburgh, Pennsylvania



H. J. Heinz Company is displaying and sampling their tin containers of Strained Foods for infants and Junior Foods especially designed for intermediate feeding. Their representatives would appreciate your recommendations regarding these foods.
Register for: *The Nutritive Value of Vegetables,* 12th edition *Nutritional Charts, Nutritional Observatory, Special Dietary Foods Book* and *Your Baby's Diary and Calendar.*

Hoffmann-La Roche, Inc. **Booth No. 17**
Nutley, New Jersey

Pharmaceutical prescription specialties of rare quality produced at Roche Park, where vitamins are made by the ton, will be exhibited. The medical profescion's interest in PER-OS-CILLIN, the new stable oral Penicillin; the versatile parasympathetic stimulant Prostigmin; and other scientific accomplishment will be satisfied by Hoffman-La Roche representatives who will be in attendance to discuss clinical problems.

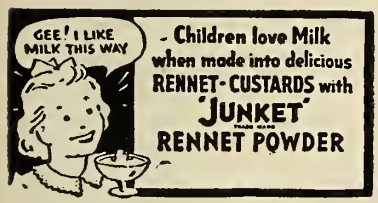
Holland-Rantos Company, Inc. **Booth No. 51**
New York, New York

You are cordially invited to visit the Holland-Rantos booth where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharge of non-specific origin. Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the Dickinson-Freret Chart.

G. A. Ingram Company **Booth Nos. 64, 65**
Detroit, Michigan

STILLE INSTRUMENTS will be displayed at the exhibit of the G. A. INGRAM COMPANY, as well as other new and approved items.

"The 'Junket' Folks" **Booth No. 46**
Little Falls, New York



In space No. 46, "The 'Junket' Folks," Chr. Hansen's Laboratory, Inc. Enlarged photos illustrate the action of the rennet enzyme in forming softer finer milk curds. Free literature describes dietary uses of rennet-custards in infant, child, convalescent, or postoperative feeding. Attendants on duty. Complimentary package of "Junket" Rennet Powder and "Junket" Rennet Tablets presented to physicians who register.

Kellogg Company **Booth No. 48**
Battle Creek, Michigan

Kellogg's famous ready-to-eat cereals, important foods in normal and restricted diets, will be displayed. All of these cereals contain valuable whole grain nutrients, either natural or restored. Pep is fortified with extra thiamine (B_1) and with vitamin D. All-Bran is one of the best sources of niacin and iron. A new Diet Manual and Nutritive Value Charts are available at the Kellogg booth. Mrs. Winefred Loggans of the Home Economics Department is in charge of the exhibit.



H. W. Kinney & Sons **Booth No. 30**
Columbus, Indiana

A. Kuhlmann & Company **Booth No. 13**
Detroit, Michigan

Lea & Febiger **Booth No. 29**
Philadelphia, Pennsylvania

Lea and Febiger will exhibit among their new works Soffer's "Diseases of the Adrenals," Quiring's "The Extremities," Olkon's "Essentials of Neuro-Psychiatry," Burch and Winsor's "Primer of Electrocardiography," and Bell on "Renal Diseases." New editions will be shown of Katz's "Electrocardiography," Levinson and MacFate's "Clinical Laboratory Diagnosis," Kovacs' "Electrotherapy and Light Therapy," Kuntz's "Autonomic Nervous System," Kuntz's "Text-book of Neuro-anatomy," Craig and Faust's "Clinical Parasitology," Clement's "Nitrous Oxide-oxygen Anesthesia," Ivy and Curtis on "Fractures of the Jaws," Stone on the "Newborn Infant" and other standard works.

Lederle Laboratories, Inc. **Booth No. 38**
New York, New York

A display of the latest product in the biological and pharmaceutical fields, featuring Folvite, Lederle's brand of Folic Acid."

Libby, McNeill & Libby **Booth No. 74**
Chicago, Illinois



Libby's strained and homogenized baby foods are featured at the Libby booth. Physicians are invited to stop and discuss new findings on the greater availability of iron and ease of digestion of Libby's Council accepted foods for babies.

Eli Lilly and Company **Booth No. 23**
Indianapolis, Indiana

The Lilly exhibit will feature an interesting demonstration in miniature on penicillin culture. Many Lilly products will be on display, and attending Lilly medical service representatives will be present to assist visiting physicians in every possible way.

J. B. Lippincott Company **Booth No. 1**
Philadelphia, Pennsylvania

You are cordially invited to visit the exhibit of LIPPINCOTT SELECTED PROFESSIONAL BOOKS, where many interesting new books and new editions will be available for your inspection. Books of particular interest include: Bancroft-Murray's new two-volume work on SURGICAL TREATMENT OF THE MOTOR SKELETAL SYSTEM; Bancroft-Pilcher's SURGICAL TREATMENT OF THE NERVOUS SYSTEM; Berens and Zuckerman, DIAGNOSTIC EXAMINATION OF THE EYE; Pitkin's CONDUCTION ANESTHESIA; Foot's PATHOLOGY IN SURGERY; Groff and Houtz, DIAGNOSIS AND TREATMENT OF PERIPHERAL NERVES; Stern and Rosenthal, DIABETIC CARE IN PICTURES; and Burket's ORAL MEDICINE.

The Liquid Carbonic Corporation **Booth No. 66**
(Wall Chemicals Division)
Chicago, Illinois

The Medical Gas Division of the Liquid Carbonic Corporation will exhibit their complete line of anesthesia, therapeutic, resuscitating gases, as well as Oxygen Therapy equipment at the 1946 Detroit session of the Michigan State Medical Society.

M & R Dietetic Laboratories, Inc. **Booth No. 44**
Columbus, Ohio

M. & R. Dietetic Laboratories, booth number 44, will display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. F. H. Behncke and L. A. MacDonald will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

McKesson Appliance Company **Booth No. 37**
Toledo, Ohio

McNeil Laboratories, Inc. **Booth No. 12**
Philadelphia, Pennsylvania

McNeil Laboratories looks forward with a great deal of pleasure to the resumption of personal contacts with its friends attending the Annual Session of the Michigan State Medical Society. Our representatives will be there not only to welcome you, but to tell you of some of the interesting news about such specialties as Hepatinic—the hemopoietic tonic containing crude (unfractionated) liver concentrate subjected to "enzymatic digestion," Butisol Sodium—the "*Intermediate* Sedative-Hypnotic," Sorparin—the new botanical drug product for hepatobiliary dysfunctions, and other interesting products of research developed during recent years.

Mead Johnson & Company **Booth No. 42**
Evansville, Indiana

Servamus Fidem means We are Keeping the Faith Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum and other infant diet materials —including the new pre-cooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to Booth No. 42 will be time well spent.

Medical Arts Surgical Supply Co. **Booth No. 71**
Grand Rapids, Michigan

You are cordially invited to visit the Medical Arts Surgical Supply Company's display of physicians' equipment, including

Hamilton Furniture
Profex X-ray
Surgical Instruments
Pharmaceuticals

Medical Case History Bureau **Booth No. 52**
New York, New York

Simplifying the Doctor's History Record and Bookkeeping System with the INFO-DEX RECORD CONTROL SYSTEM.
Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The INFO-DEX Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive.

THE MEDICAL CASE HISTORY BUREAU Of New York City has specialized for many years in record forms for the doctor's office. Their well-informed representatives will gladly demonstrate the Info-Dex System and discuss your office problems.

Medical Film Guild **Booth Nos. 7, 8**
New York, New York

Medical Film Guild through their "MEDICAL FILMS THAT TEACH" presents a refresher course in fundamental medical problems. These films, representing several years of research, are condensed into half hour productions, each acting as a visual text book. They review such subjects as Parkinson's Disease, the major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism and industrial medicine. They are available to medical societies, medical schools and hospitals and include projection service at no charge, through grants for postgraduate instruction.

Medical Protective Company **Booth No. 3**
Fort Wayne, Indiana

The Medical Protective Company is represented at booth No. 3 where you are invited to call. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for forty-seven years. Bring your professional liability questions and problems to booth No. 3.

Merck & Company, Inc. **Booth No. 76**
Rahway, New Jersey

The Merck exhibit is devoted to the important subject of antibiotic agents, with emphasis on Streptomycin. Antibacterial activity, potential clinical applications, and pharmacological data are presented. Literature on Streptomycin and Penicillin is available, as is also literature on other important chemotherapeutic and nutritional agents, including the Vitamins, the Sulfonamides, the anesthetic agent. Vinethene, and Pyridium, for prompt symptomatic relief in genito-urinary infections.
Mr. S. A. Gaffney will be present to greet his old friends and acquaintances.

The Wm. S. Merrell Company **Booth No. 70**
Cincinnati, Ohio

The Merrell exhibit, under the direction of Messrs. Ferd Heckle and Henry Haas, will feature several new therapeutic agents of wide usefulness in clinical practice. Members and guests of the Society are invited to visit the Merrell booth.

Michigan Medical Service **Booth No. 10**
Detroit, Michigan

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and past six years of operation: (a) Paid to Doctors for Services Rendered; (b) Number of Services Rendered; (c) Growth in Subscribers and Services Rendered (d) Percentage of Income Paid for Administrative Costs; and (e) Assets and Liabilities.

C. V. Mosby Company **Booth No. 50**
St. Louis, Missouri

A cordial invitation is extended to visit the C. V. Mosby Company, booth, where a representative line of publications of timely interest will be displayed. New books and new editions to be shown will include Clendening-Hashinger "Methods of Diagnosis," Key-Conwell "Fractures, Dislocations and Sprains," Tassman "Eye Manifestations of Internal Diseases," Polyak "The Human Ear in Anatomical Transparencies,"

Rubin "Uterotubal Insufflation," Banyai "Pneumoperitoneum Treatment," John "Diabetes," Main 'Synopsis of Physiology," and Anderson "Synopsis of Pathology." Mr. Arthur Grabruck will be in attendance and glad to discuss your book requirements with you.

National Live Stock and Meat Board **Booth No. 57**
Chicago, Illinois

You are cordially invited to visit the National Live Stock & Meat Board booth and see the completely revised Food Value Charts in their colorful new dress. The second edition of the Nutrition Yardstick featuring plastic slides and other informative material on nutrition will also be on display.

Wm. R. Niedelson **Booth No. 79**
Detroit, Michigan

The first showing of the newest cardiographic improvement in years, the CARDIOTRON, a direct-writing type, will be made at our exhibit. This instrument will eliminate photographic processess, batteries, and give permanent records.
Also on view will be the latest model Jones "MOTOR-BASAL," the original waterless BMR unit.

Ortho Pharmaceutical Corporation **Booth No. 56**
Linden, New Jersey

Ortho Pharmaceutical Corporation will feature their new Triple Sulfa Vaginal Cream, specifically designed for the treatment of bacterial vaginitis. Literature and samples will be available.
In addition, Ortho's complete line of Genetic Pharmaceuticals will be displayed.

Parke, Davis & Company **Booth No. 16**
Detroit, Michigan

Representatives of PARKE, DAVIS & CO., well informed concerning progress in Pharmaceutical Research, and desirous of presenting new advancements to you, will be in attendance at our Technical Exhibit to discuss the nature and employment of new and present products. Displayed will be such outstanding products as THEELIN, MAPHARSEN, and ADRENALIN PREPARATIONS. The latest type of BIOLOGICALS will be on display. Likewise, PENICILLIN and other therapeutic agents of antibiotic, biological, and chemotherapeutic interest will be shown. We sincerely invite your visit to this Exhibit.

Pet Milk Company **Booth No. 19**
St. Louis, Missouri

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding.Miniature cans will be given to physicians visiting the exhibit.

Philip Morris & Co. Ltd., Inc. **Booth No. 69**
New York, New York

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

Picker X-Ray Corporation **Booth Nos. 27, 28**
New York, New York

Picker will exhibit the new Minograph miniature film chest unit which is used for mass survey work; and also for installation in hospitals for screening purposes. A small unit suitable for office practice will also be shown as well as a complete line of radiographic accessories.

Pitman-Moore Company **Booth Nos. 40, 41**
Indianapolis, Indiana

Hospitality will be the watch word at the Pitman-Moore exhibit, booths 40 and 41, with more emphasis on good-fellowship than the products displayed. In attendance to greet their friends in the profession and to discuss recent medical advances will be Messrs. Stuart Ruch, B. J. O'Connell, Jay Ruby and R. G. Mills.

Procter & Gamble Company **Booth No. 36**
Cincinnati, Ohio

Instructions for Bathing of Patient in Bed, the second of Procter & Gamble's time-saving series of handy leaflet pads, is now available. Doctors may also reorder "Instructions for Home Treatment of Acne." Additional leaflets on similar questions of routine home care are being prepared for future distribution.

Professional Management **Booth No. 81**
Battle Creek, Michigan



PROFESSIONAL MANAGEMENT —Records "tailor-made" for the medical profession. If YOUR office does not seem to "click," learn how PM helps hundreds to iron out their problems.

Radium Emanation Corporation **Booth No. 18**
New York, New York

In Booth No. 18, THE RADIUM EMANATION CORPORATION will exhibit a wide variety of instruments and applicators used in modern radium therapy, including permanent and removable composite, leakproof Radon Seeds. The advantages of these seeds will be demonstrated by magnified sections showing their construction in detail.

Randolph Surgical Supply Company **Booth No. 72**
Detroit, Michigan

Randolph Surgical Supply Company will display the latest developments of leading Manufacturers. ART RANKIN and CLIFFORD RANDOLPH will be on hand to welcome the Doctors.

W. B. Saunders Company **Booth No. 4**
Philadelphia, Pennsylvania

Mr. Frank Patterson will represent this publishing house and will exhibit its complete line of books, including Bockus' 3-volume work on "Gastro-enterology," new (5th) edition of Beckman's "Treatment," Allen, Barker & Hines' "Peripheral Vascular Diseases," new (2) edition of Mason's "Preoperative and Postoperative Care," new (2nd) edition of Graybiel & White's "Electrocardiography," new (3rd) edition of Andrew's "Diseases of the Skin," Cooke's "Allergy," new (5th) edition of Curtis' "Gynecology," Jackson & Jackson's "Diseases of the Nose, Throat and Ear," new (4th) edition of Mitchell & Nelson's "Pediatrics," and many others.

Schenley Laboratories, Inc. **Booth No. 68**
New York, New York

The Schenley Laboratories' exhibit is devoted entirely to penicillin and penicillin products, and features clinical illustrations of treated patients. The complete apparatus for penicillin aerosol treatment of respiratory infections by inhalation is demonstrated to interested physicians by well-informed attendants at the booth. Descriptive literature concerning this treatment method and various Schenley Laboratories' products is supplied on request.

Schering Corporation **Booth No. 5**
Bloomfield, New Jersey

The Schering exhibit will feature the latest developments in endocrine therapy, radiographic aids and other pharmaceutical advances.
Of particular interest is the presentation of Combisul-TD. Combisul-TD is a sulfonamide combination based upon the now proved therapy which offers the therapeutic benefits of sulfathiazole and sulfadiazine with a material decrease in the danger of renal toxicity and crystalluria.
Schering professional service representatives will be present to answer inquiries and to provide valuable informative literature.

G. D. Searle & Company **Booth No. 11**
Chicago, Illinois

You are cordially invited to visit the Searle Booth where representatives will be happy to answer questions pertaining to Searle Products of Research. Featured will be Searle Aminophyllin, Metamucil, Ketochol, Floraquin, Diodoquin, Pavatrine, Tetrathione, and Gonadophysin.

Sharp & Dohme, Inc. **Booth No. 24**
Philadelphia, Pennsylvania

Sharp & Dohme will have their display at booth No. 24 featuring Tyrothricin Concentrate for Human Use, "Lyovac," Normal Human Plasma, "Sulfathalidine," "Sulfasuxidine," and "Caligesic" Ointment, a greaseless anesthetic and analgesic ointment which possesses definite antipruritic action. A cordial welcome awaits all visitors.

Smith, Kline & French Laboratories **Booth No. 73**
Philadelphia, Pennsylvania



Benzedrine Sulfate Tablets, N.N.R. and Dexedrine Sulfate Tablets are featured at this exhibit.
Since its introduction some ten years ago, Benzedrine Sulfate, N.N.R. (racemic amphetamine sulfate) has grown steadily in clinical usefulness and today occupies a unique place in routine medical practice. For certain selected cases, however, it is often desirable to employ a drug combining an even more preponderant central nervous stimulation with a relatively weaker peripheral effect. A closely related compound—Dexedrine Sulfate (dextro-amphetamine sulfate)—precisely fulfills these requirements.
Our specially trained professional representatives will be glad to answer questions concerning the possible uses of our products in your practice.

Spencer Incorporated **Booth No. 47**
New Haven, Connecticut

You will be interested in Spencer Individually Designed Supports for abdomen, back and breasts. On display are supports for patients who have undergone mastectomy. Also displayed are supports for hernia, visceroptosis, nephroptosis with symptoms, obesity, back conditions and back derangements, antepartum and postpartum wear, and breast conditions.

E. R. Squibb & Sons **Booth No. 58**
New York, New York

An exhibit showing the blood levels produced by penicillin when administered in either Oil and Wax or in aqueous solution. Dosages for a variety of diseases are also shown.

Frederick Stearns & Company **Booth No. 75**
Detroit, Michigan

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division.
Neo-Synephrine Hydrochloride products for intranasal, parenteral and ophthalmic use will be featured.
Appella Apple Powder, remarkably efficient therapy for diarrhea;
Gastric Mucin. "nature's antacid;" and various vitamin products will also be shown.

James Vernor Company **Booth No. 80**
Detroit, Michigan

The James Vernor Company invites everyone attending the Annual Session to visit booth Number 80 and have the Vernor Gnome serve you a free bottle of Vernor's Ginger Ale. Personnel from the James Vernor Company will be on hand to answer any questions regarding Vernor's Ginger Ale, and make arrangements for you to inspect the Vernor plant at 239 Woodward Avenue, Detroit.

Westinghouse Electric Corporation **Booth No. 62**
Pittsburgh, Pennsylvania

Westinghouse Electric will feature the Monoflex, its new deluxe single tube diagnostic x-ray table. See this new unit with:

- . . . Motor driven tilting table.
- . . . Automatic horizontal leveling stop.
- . . . 14" Tubearm movement—from 30" to 40".
- . . . Fluoroscopic screen movement 3-3/16" to 17-3/16".
- . . . New fluoroscopic screen "parking."

White Laboratories, Inc. **Booth No. 49**
Newark, New Jersey

White Laboratories, Inc., at Booth No. 49 present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections—and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias.
White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

Winthrop Chemical Company, Inc. **Booth No. 45**
New York, New York

Winthrop Chemical Company, Inc., New York (Booth 45), has available a number of interesting and highly informative booklets. Ask particularly for your copy of Demerol, new analgesic, spasmolytic and sedative, and Creamalin, non-alkaline antacid.

Zimmer Manufacturing Company **Booth No. 2**
Warsaw, Indiana

A full line of Fracture Equipment will be on display. The representative in charge of the booth is well versed in the treatment of fractures, and will gladly demonstrate the use of any items in which the doctors are interested. Among the new items on display, which will interest the surgeons will be the Two Speed Hand Drill, Bone Clamp Set, Electric Cast Cutter, Bush Walking Heel, Webb Bolt Fixation Set, Moore-Blount Blade Plates and Instruments for Hip Surgery, Eggers Bone Plates, McBride Tripod Pin Traction Apparatus, Waugh Clamps, Crego-McCarroll Traction Bow, Blount Knee Retractor, Curry Hip Nail Reamer, Lewin Walking Heel and the Hopkins Hip Nail Extension.

Annual Reports

ANNUAL REPORT OF THE COUNCIL, 1945-46

The Council met three times and the Executive Committee met ten times (up to September 22, 1946), a total of thirteen meetings up to the 1946 session of the State Society. All matters studied and recommendations made by the Society's twenty-nine Committees, as well as The Council's own twenty Committees, and all business of the Society were routinely referred to The Council or its Executive Committee for consideration, approval, and action.

Membership

Members of the State Society as of July 1 and as of December 31, from 1935 to 1946, are indicated in the following chart:

	1946	1945	1943	1941	1939	1935
July 31	4461	4425	4661	4403	4255	3410
December 31		4686	4786	4621	4425	3653

The figures for 1946 include 3,033 active members, 75 Emeritus, Retired, and other special members, and 1,353 Military Members. Members in military service are accorded full membership privilege of the State Society and their dues and assessments are remitted; this applies to all members separated from military service during the years 1945, 1946, 1947 et seq. Remission of dues and assessments, therefore, will continue for a large percentage of the membership for a considerable period after the war.

Finances

One of the major items in connection with the finances of the Michigan State Medical Society during the year has been a special assessment which was voted by the House of Delegates at the 1945 annual meeting. The funds accruing from this assessment have been used in part in an intensive public education program, which is at this time showing very definite beneficial results. The employment of a full time Public Relations Counselor has been one of the major items in this program. Your Executive Committee of The Council has deemed it advisable to set aside a portion of the funds accruing from this assessment for a contingency. It would seem desirable, however, to give serious consideration to a continuation of the activities of the Public Relations Committee and Counselor for 1947.

In December 1945, the Executive Committee of The Council authorized the return of $16,871.75 to the constituent County Societies, this fund having been accumulated by a special five-dollar assessment to be utilized in medical veterans readjustments. The action of the Executive Committee met with wholehearted approval of the County Societies.

The Auditor's report for the year 1945 shows that the finances of this Society, while not reflecting a large accumulation of cash, are in a sound state. The investment in bonds has been increased slightly and has been made in securities that do not fluctuate in value.

The paid membership is only slightly above that of the same date one year ago, but the revenue which will accrue from new members and those who have returned from military service should show a considerable increase in 1947.

The Journal

Our JOURNAL has had a very successful year. Your Publication Committee is always striving to improve the quality of THE JOURNAL. In spite of the fact that there were no general assemblies held during 1945, we have been able to obtain a sufficient number of scientific articles for publication. We hope that our military members who are now back in civilian practice will be able to furnish THE JOURNAL with many original articles. With this increase in the number of scientific articles, reporting of county society activities, strong and forceful editorials, and printing an attractive journal, we hope to create an interest so that every physician will read THE JOURNAL.

The amount of advertising has greatly increased the size of THE JOURNAL, the May number being the largest we have ever published. It will be necessary to change the type of binding if more pages are to be added. All advertisements are approved by the Publication Committee before printing and only those of reliable manufacturers and of proven merit are accepted.

Mr. J. R. Bruce of the Bruce Publishing Company has notified our Executive Office that it will be necessary to increase the cost of printing THE JOURNAL ninety cents a page, with a five to fifteen cents increase later. This will amount to approximately $135.00 a month. These increased costs are due to new contracts with labor unions. We see no way to combat this except to increase our advertising rates.

Dr. Wilfrid Haughey, Editor, is chiefly responsible for the success of THE JOURNAL. His editorial policy has been strong and fearless. The many and varied attacks against organized medicine by proposed legislation in Congress have given Dr. Haughey considerable material for comment. Michigan is the leader in the field of Socio-Economics. National organizations and other State Medical Societies look to our JOURNAL to find out what's new. His editorials have been widely read outside the state and reprinted in other State Journals.

Many articles on Political Medicine, Rehabilitation of the Veterans, Medical Public Relations, President's Conference, Michigan Medical Service, Uniform Fee Schedule, National Health Congress, and the contract with the Veterans' Bureau for service-connected disabilities, home and office care, have been written and published in THE JOURNAL.

Due to a shortage of materials, labor strikes, increased size of THE JOURNAL and the use of color in the advertisements, THE JOURNAL appeared late each month, but we hope that this soon can be corrected.

Your Publication Committee welcomes constructive criticism any member wishes to offer.

Organization

Organization in all component county medical societies is better at the present time than during the period of the war with its restrictions on travel, etc.

J. Duane Miller, M.D., Grand Rapids, was appointed as Councilor of the Fifth District, on July 19, 1946, to complete the term of A. B. Smith, M.D., resigned.

Meetings in 14 Councilor Districts were held during the autumn of 1945 and the winter and spring of 1946. These included meetings at : St. Louis, October 4, 1945, Niles, December 13, 1945, Ann Arbor, January 10, 1946, Owosso, January 25, 1946, Battle Creek, February 5, 1946, Detroit, February 4, 1946, Jackson, February 19, 1946, Bloomfield Hills, March 6, 1946, Muskegon, April 9, 1946, Alpena, April 18, 1946, and Traverse City, May 29, 1946. Upper Peninsula Medical Society meeting in June. Your MSMS Officers and members of The Council attended these District Meetings and spoke on such subjects as "Medical Economics," "Modern Medical Public Relations," "The Fourteen 'Firsts' of Michigan Medicine," and "Veterans Administration Home Town Care Plan with Michigan Physicians."

The County Secretaries Conference of January 20, 1946, at the Wardell-Sheraton Hotel, Detroit, attracted a large and interested group of county secretaries, keymen, and representatives of the Woman's Auxiliary. Presentation of topics important to medicine were made

by: R. L. Novy, M.D., Detroit; Col. J. C. Harding, Washington, D. C.; L. Fernald Foster, M.D., Bay City; E. I. Carr, M.D., Lansing; E. J. McCormick, M.D., Toledo, and S. W. Insley, M.D., Detroit.

A Public Relations Conference was held in Lansing, February 21 which some 80 county society public relations officers and other key men attended. The speakers on this new type of program in medical organizational work were: E. B. Harper, East Lansing, J. W. Holloway, Jr., Chicago; R. L. Sensenich, M.D., South Bend; A. S. Brunk, M.D., Detroit; E. F. Stegen, Chicago, and T. A. Hendricks, Chicago.

Augmented Public Relations Program

A full-time Public Relations Counsel, Hugh W. Brenneman, was engaged in January by the State Medical Society. The great scope of his work can best be appreciated by outlining some of the sub-titles:

Program of newspaper advertising.
Radio programs.
Feature stories in national magazines.
Health education in schools.
Contacts with the laity through medical membership in fraternal, civic, and veterans organizations.
Speaker's bureau, both on a state and county basis.
News releases.
Contacts with newspapermen and radio broadcasters in their own communities, with labor and industry, with federal congressmen and state legislators in their home communities.
Arrangement of educational conferences for lawmakers, business, and insurance leaders and others interested in public health.
Development of booklets and printed material showing benefits of American medicine and private practice aided by voluntary, prepaid, service plans.

The services of the Woman's Auxiliary, the Michigan State Nurses Association, the Michigan Health Council and many other lay health organizations whose interest lies along lines related to those of the medical profession have been obtained in the preparation and distribution of information and in other forms of active co-operation.

Michigan's Composite Outline of "Health Legislation Beneficial to the People" was developed, urged upon other State Medical Societies, adopted almost in toto by the Conference of Presidents and Other Officers of State Medical Associations on December 2, 1945, in Chicago. Much of the medical thinking in this Outline was embodied in the Taft Health Bill (S. 2143) introduced by Senator Robert A. Taft of Ohio on May 3, 1946. The Michigan State Medical Society has approved and endorsed the Taft Health Bill as the most sane approach to a better distribution of medical care in this country.

The Michigan State Medical Society conceived and stimulated the organization of the Conference of Presidents and Other Officers of State Medical Associations. This Conference of Presidents, in the short space of its one year's existence, has become the activating force in the stimulation and development of a socio-economic program on the national level as reflected in the recent action of the House of Delegates of the American Medical Association; this program modernizes the activities of the American Medical Association in the fields of scientific medicine, economics, and public relations.

The phrase "Another First for Michigan" has become a byword in medical circles outside this State. Few members of the Michigan State Medical Society realize the enviable reputation for pioneering which their organization enjoys throughout the land. Suffice it to say that Michigan holds a commanding position of leadership among state medical societies because the MSMS membership has had the courage within recent years to experiment and try out plans and programs for the benefit of its members and those whom they serve. All this has required fine organization, which fortunately the Michigan State Medical Society possesses.

Committees

The MSMS Committees continue to be very active. We earnestly invite your consideration of the splendid annual reports of these productive groups in whose hands the progress of the Michigan State Medical Society is molded. These reports are published both in THE JOURNAL and the Handbook for Delegates.

Public Relations Committee—The work of this Committee was outstanding during the past year. Its many-sided activities in medical public relations are fully outlined in the Public Relations Committee report (see Page 68).

A program calling for a series of twelve original pamphlets written and distributed in collaboration with the Michigan Health Council, Michigan Hospital Service and Michigan Medical Service is being felt in this State, despite the newness of the approach. The Public Relations Committee has conceived a long-term, overall plan for medical public relations that will not only serve the MSMS well but in addition is already being watched by other state societies to guide them in their efforts.

The Special Committee on Radio, a subcommittee of the Public Relations Committee, completed its two series of presentations over WJR and over a radio network of fifteen Michigan stations in May of 1946. The value of radio advertising—especially of radio advertising of an intangible product such as good will—is difficult to assay. But The Council feels that all avenues of approach to the public should be utilized, and if some minor mistakes are made, they will be errors of commission rather than the graver sin of omission or doing nothing. Suffice it to say that the Michigan State Medical Society, and its public relations program which is unique among State Medical Societies, is endeavoring to do a big job in behalf of the medical profession of this State and for the direct benefit of their patients.

During the year, two new Committees were created at the suggestion of the American Medical Association: the Committee on Rural Health Service, and the Committee on National Emergency Medical Service.

The Child Welfare Committee co-operated with the American Academy of Pediatrics in its nation-wide study of child health care and services. It is notable that the work in Michigan was done on a voluntary basis, without benefit of governmental funds.

Five Regional Industrial Health Conferences are being sponsored by the MSMS Industrial Health Committee in the areas surrounding the cities of Bay City, Flint, Grand Rapids, Lansing, Pontiac, and Saginaw.

A Special Committee on the Study of Infectious Enteritis was created during the past year, representative of the Child Welfare Committee and the Maternal Health Committee; this group is co-operating with the Michigan Department of Health.

The Committee on Scientific Work arranged an unusually splendid program for the 1946 Annual Session in Detroit. Those who attend the three-day Annual Session will have best evidence of the many months of thought and preparation spent by the Committee on Scientific Work.

The Committee on Postgraduate Medical Education continued this year, as in the past, to offer a program in postgraduate work to Michigan physicians—brought to them at their very front doors.

The Postgraduate Foundation Committee was a very active group, in its attempts to bring $150,000 to the Michigan Foundation for Medical and Health Education. Thanks are due the members of this Committee for their sacrifice of many hours in developing the campaign and in contacting the many doctors of medicine able and willing to contribute to this worthy cause. *The recommendation on this subject follows.*

The Rheumatic Fever Control Committee developed nine Consultation and Diagnostic Centers throughout the State, all working vigorously to aid in the control of this killer of children. Special thanks are extended to the Michigan Society for Crippled Children and Dis-

abled Adults for its generous grant of $15,000 to aid in carrying on this important work.

Contacts with Governmental Agencies

More and more, the Michigan State Medical Society finds itself making contacts with governmental agencies, both federal and state. Chief among these during the past year were:

1. *Veterans Administration.*—At practically every meeting of The Council and its Executive Committee, the contract between the Veterans Administration and the physicians of Michigan, for "home town medical care of veterans" through Michigan Medical Service, was discussed. The contract, effective January 15, 1946, was given careful perusal by The Council and its legal counsel and staff before final approval. That which was a bare hope in the minds of the Michigan medical profession last September is now an accomplished fact, resulting in over 500 patients per day being given medical care by their own family doctor. This example of decentralization of governmental medicine, with its successful utilization of the private physician-patient relationship, is like an atomic explosion in the faces of all proponents of socialized medicine, as exemplified in the Wagner-Murray-Dingell bill. A true vote of thanks is due General Paul R. Hawley for his medical understanding of the profession's viewpoint and problems. This is "Another First for Michigan."

2. *The Uniform Fee Schedule for Governmental Agencies,* as adopted by the 1945 House of Delegates, was put into effect January 1, 1946. This was one of the pillars on which the Veterans Administration medical care program in Michigan was built. Without the Uniform Fee Schedule for Governmental Agencies, the advantages of the home town medical care program for veterans would not be enjoyed in this state. The Uniform Fee Schedule for Governmental Agencies has been approved not only by the Veterans Administration, but also by the State Office of Veterans Affairs, and in principle by the Michigan Crippled Children Commission, the State Rehabilitation Office, and the State Welfare Commission. Great progress has been accomplished in twelve months, but the work will not be complete until the Uniform Fee Schedule is approved and adopted by every governmental agency—county and municipal—in the State. As a beginning, MSMS representatives met with the officers of the Association of County Social Welfare Boards on April 3, to come to a meeting of minds on the Uniform Fee Schedule. *A recommendation on this subject follows.*

3. *Licensure of Hospital Residents.*—This problem was discussed at every meeting of The Council and its Executive Committee since December 19, 1945. The need for changes in the rules of the Michigan State Board of Registration in Medicine so that second year interns and residents may be permitted to fulfill the educational duties of their office without being required to have a license to practice medicine, has been apparent to all doctors of medicine associated with hospitals having interns and residents. Representatives of the Michigan State Board of Registration in Medicine and of the Basic Science Board met with the Executive Committee of The Council on December 19, 1945. In January, 1946, The Council recommended changes in the Administrative rules of the State Board of Registration so that second year interns and residents be permitted to continue their education in approved hospitals without being licensed. The matter was finally presented to the State Board of Registration in Medicine on July 2 resulting in the following action. The Board ruled that interns may complete their second year of training in approved hospitals without license to practice.

4. *Veterans Readjustment Center at Ann Arbor.*—The administrative procedure of this Center was studied by the Executive Committee of The Council and the method of caring for veterans at the Center was approved, upon recommendation of the Committee on Mental Hygiene.

5. *Michigan Department of Health.*—The Health Commissioner, William DeKleine, M.D., was routinely invited to and attended meetings of the Executive Committee and of The Council during the past year, to discuss matters of mutual interest.

6. *Michigan High School Athletic Accident Benefit Plan.*—Meetings in February and in May with representatives of the plan resulted in a better working arrangement for physicians generally and the improvement of procedures having to do with medical practice.

7. *The University of Michigan* contacts were pleasant and constructive during the past year. The Liaison Committee headed by E. I. Carr, M.D. continues to meet periodically with President Alexander G. Ruthven and his staff. The University is to be thanked for its donation of valuable time over radio station WJR for scientific radio presentations given by members of the Michigan State Medical Society.

8. *State Rehabilitation Advisory Committee.*—F. H. Drummond, M.D., Kawkawlin, an MSMS Councilor, was appointed in March as the State Society's representative to this Committee, succeeding C. L. Hess, M.D., resigned.

9. *Office of Veterans Affairs.*—Splendid co-operative activity with this State office has been enjoyed during the past year. The Office of Veterans Affairs has been very helpful in supplying hospital and medical care for veterans with nonservice connected disabilities.

10. *Michigan Crippled Children Commission.*—The usual fine relationship continues to exist between the Michigan Crippled Children Commission and the Michigan State Medical Society, due primarily to the understanding co-operation of its Chairman, Emmet Richards of Alpena, and its Medical Director, Carleton Dean, M.D., Lansing.

Contacts with Non-governmental Agencies

1. *Michigan's rheumatic fever control program,* underwritten by the Michigan Society for Crippled Children and Disabled Adults of which Percy C. Angove of Detroit is Director, began with a conference in Detroit in September, 1945. The nine Rheumatic Fever Centers are located in Ann Arbor, Bay City, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Marquette and Traverse City. This represents still another First for Michigan Medicine.

2. *Michigan Foundation for Medical and Health Education, Inc.*—This Foundation, incorporated in October 1945, has already achieved 57% of its goal of $150,000 by September 23, 1946. The Michigan State Medical Society transferred to the new Foundation the assets of the old MSMS Foundation for Postgraduate Medical Education, amounting to $23,519.61. As of June 1, 1946, the assets of the Michigan Foundation were $112,000.

3. *The Michigan Hospital Sevice* contract with the Veterans Administration was the subject of consideration at the Executive Committee meetings of March, April, and May. The various amendments recommended by the Michigan State Medical Society were accepted by Michigan Hospital Service and by the Veterans Administration, and the contract was successfully put into operation early in June. This will offer hospitalization in Michigan, in private hospitals, to veterans having service-connected disabilities. The MSMS amendments included protection of the private physician relationship, such as in diagnostic procedures, in hospitals.

4. *Michigan Medical Service* continues its good work of public service, and holds the enviable lead position among similar plans throughout the nation. Its Executive Vice President, J. C. Ketchum, was chosen by the American Medical Association to head the Medical Care Plans Division of its Council on Medical Service and Public Relations.

Matters Referred to Council by MSMS House of Delegates

1. *Resolution re Veterans Administration,* calling for the formulation of a fee schedule for use by Veterans Administration. The purpose of this resolution was accomplished by the adoption of a Uniform Fee Schedule for Governmental Agencies.

2. *Resolution re wards of government and indigents,* also calling for a uniform fee schedule—again accomplished by the adoption of a Uniform Fee Schedule for Governmental Agencies.

3. *Resolution re Veterans Administration Hospital Contract.*—The objectionable contract of the preceding Veterans Administration has been entirely eliminated through the signing of contracts with the Veterans Administration by Michigan Hospital Service and Michigan Medical Service. The great importance of this achievement cannot be over-emphasized.

4. *Resolution re "Outline" of MSMS Drafting Committee on Legislation.*—The general purpose of this resolution has been accomplished through the introduction of the Taft Health Bill, approved by The Council, Michigan State Medical Society. It is to be noted that this legislation, much of which the medical profession of the nation could have submitted as its own, was not done by or through the American Medical Association (as recommended in the resolution). The resolution was adopted by the Conference of Presidents and Other Officers of State Medical Associations, and in December, 1945, by the AMA House of Delegates, which recommended that a six months' study of the resolution be made. The action of the AMA House of Delegates in July, 1946 (San Francisco) was as follows:

"Following the reorganization voted on July 2, your Reference Committee on Legislation and Public Relations is of the opinion that this subject . . . will be promptly considered by the proper authorities." The House of Delegates adopted this committee report.

5. *Resolution on General Practice.*—For many years the medical profession felt the need of a General Practice Section in the American Medical Association. Forty per cent of our membership were of the opinion they were not represented. Due to the movement started in this State (another "First for Michigan"), a General Practice Section was created by the AMA House of Delegates in Chicago, December, 1945. A Michigan physician, W. B. Harm, M.D., Detroit, was chosen Secretary last year and was re-elected at the San Francisco Session in July, 1946. We are informed an active program is planned.

6. *Resolution re American Cancer Society.*—The purposes of this resolution were implemented. With the reorganization of the American Cancer Society within the last few months, the MSMS Cancer Control Committee Chairman urges full co-operation by county societies with its Field Army.

7. *Resolution on AMA Constructive Program of Medical Care.*—This Resolution was properly implemented.

8. *Resolution re Need for More Residents in Hospitals.*—A report on The Council's action relicensing of hospital residents has already been made under "Contacts with Governmental Agencies," Item 3.

9. *Resolution re Pledge Card.*—This was implemented, as far as possible, during the past year. However, it is to be noted that the profession objected, to a marked extent, against this activity as a form of "regimentation" by a voluntary group.

10. *Resolution on American Health Care.*—The result of this resolution was the creation of the Commission on Health Care (R. H. Pino, M.D., Chairman, F. G. Buesser, M.D., B. R. Corbus, M.D., F. H. Drummond, M.D. and H. M. Pollard, M.D.) which held a number of meetings. A separate report will be presented to the MSMS House of Delegates by this Commission.

11. *Resolution re Employment of Public Relations Man.*—This was implemented as previously reported.

Miscellaneous

1. *Liberalization of Military Membership.*—Throughout the year, The Council and its Executive Committee have attempted in numerous ways to liberalize military membership in the State Society to the end that all medical veterans in Michigan, including recent graduates and those who come from other States into Michigan, are embraced into the membership of the Michigan State Medical Society with remission of dues for one year after their separation from military service. Already several additional scores of Military Members have joined the MSMS as new members. This generous treatment of veterans will undoubtedly reap rewards for the Society in future years.

2. *Pelouze Lectures.*—An innovation in scientific postgraduate work was the presentation of Percy Starr Pelouze, M.D. of Philadelphia in a series of lectures in fifteen cities of Michigan on "The Modern Treatment of Gonorrhea."

3. *A medical economics course* given by practitioners of medicine—officers of the Michigan State Medical Society—was sponsored by Wayne University College of Medicine during March. It is hoped that similar courses will be presented at Wayne University and also at the University of Michigan in ensuing years.

Government Pamphlets Favoring Socialized Medicine

Two samples of this type of propaganda, one from the United States Department of Agriculture, and the second used as a text book in the Army and Navy, entitled "Is Your Health the Nation's Business" appeared during the past year. A great flood of propaganda *for* socialized medicine and in particular in behalf of S. 1606, the Wagner-Murray-Dingell bill, is apparent in Washington, according to reports from U. S. Senators, who also report that little response is received from their constituents *against* this type of legislation. The responsibility of the medical profession is obvious. *A recommendation on this subject follows.*

Recommendations

The Council recommends:

1. That the campaign for funds in behalf of the Michigan Foundation for Medical and Health Education be continued during the ensuing year, and that the House of Delegates appoints its individual members as a special committee to encourage other doctors of medicine, as well as laymen interested in sound medical service and education, to contribute during the next 365 days, as generously as their means permit, to the Michigan Foundation for Medical and Health Education.

2. That the House of Delegates again urge all component County and District Medical Societies to make special effort, as soon as possible, to negotiate necessary revisions in schedules of benefits covering governmental wards so that individual members are not penalized by being forced to perform services at a financial loss and below the fees either charged for private patients in their particular areas, or those indicated in the Uniform Fee Scheduled for Governmental Agencies.

3. That every individual doctor of medicine in Michigan strongly oppose all attempts leading to a complete compulsory sickness insurance program organized and maintained by government (such as proposed in the Wagner-Murray-Dingell bill of 1946); that they fight in a *positive* way to defeat such schemes by (a) eliminating any flaws that may result in complaints on the part of patients; (b) encouraging Michigan Medical Service, the voluntary program sponsored and operated by

the Michigan medical profession itself—the greatest and most successful group medical care program in the world; (c) by working with patients and the public generally, especially those in political office, to explain the benefits of the present system based on the time-tried private practice of medicine and the preservation of the private physician-patient relationship, which has made American medicine the greatest in the world; (d) by urging friends, patients, and acquaintances to encourage their U. S. Senators and Congressmen to keep private medical practice as we know it with its constantly ascending plane of accomplishments which has brought to the American people the best health care in the world.

Respectfully submitted,

E. F. Sladek, M.D.
C. E. Umphrey, M.D.
P. A. Riley, M.D.
Wilfrid Haughey, M.D.
R. J. Hubbell, M.D.
J. Duane Miller, M.D.
R. C. Pochert, M.D.
T. E. DeGurse, M.D.
W. E. Barstow, M.D.
F. H. Drummond, M.D.
O. D. Stryker, M.D.
A. H. Miller, M.D.
W. H. Huron, M.D.
D. W. Myers, M.D.
O. O. Beck, M.D.
E. R. Witwer, M.D.
P. L. Ledwidge, M.D.
R. S. Morrish, M.D.
W. A. Hyland, M.D.
L. Fernald Foster, M.D.
A. S. Brunk, M.D.

ANNUAL REPORT OF CANCER COMMITTEE, 1945-46

The Cancer Control Committee held two meetings during the past year; one on November 15, 1945, the other on January 3, 1946. At these meetings the following proposals for 1945-46 Program of Cancer Control were made:

1. Stimulate formation of tumor clinics in Saginaw, Lansing, Battle Creek, Kalamazoo, Pontiac and Port Huron.

2. Schedule a subject on Cancer at the next annual meeting of the MSMS, also a cancer round table.

3. Arrange for a discussion on cancer at the next, or early postgraduate course, also a speaker or speakers who would be available for conferences throughout the state.

4. Stimulate cancer teaching days in each county and district medical society.

5. (a) Support cancer detection clinics which are organized under proper medical supervision.

   (b) A Plan for Cancer Work in Michigan was presented by Dr. Norman Miller and after discussing it, the plan was adopted by the Committee. The Plan is divided into three groups.

   (1) Cancer Education Unit
   (2) Cancer Detection Clinics
   (3) Tumor Clinic

Its first phase was felt applicable throughout the state. The second phase, Cancer Detection Clinics, it was decided, would require during the development stage, careful and guided approach, including a thorough investigation of the patient, an accurate history, physical examination and all methods of diagnosis to fully determine whether the patient has or has not cancer should be employed to their best advantage.

The third phase, tumor clinics for larger centers, should follow the American College of Surgeons recommendations.

6. The question of approving clinics by the Cancer Committee of the Michigan State Medical Society would be held in abeyance until such time as the clinic was established and then a review of the clinic's work with an accurate survey of its records would be in order for determining in which group of the Cancer Committee's Plan this particular clinic should be placed. The survey would be made at the request of the local group.

7. All Cancer Clinics are to be approved by the Cancer Committee of the MSMS.

8. The plan for cancer work in Michigan adopted by the Committee is somewhat of a temporary nature and subject to change as our study of clinics in progress of operation is developed; the plans are more of a preliminary outline for the various groups about to inaugurate cancer work to have a basis on which to begin.

Respectfully submitted,

William A. Hyland, M.D., *Chairman*
F. A. Coller, M.D.
C. K. Hasley, M.D.
A. H. Kretchmar, M.D.
S. E. Gould, M.D.
A. B. McGraw, M.D.
N. F. Miller, M.D.
H. M. Pollard, M.D.
H. L. Weitz, M.D.
W. S. Reveno, M.D.
F. L. Rector, M.D.

ANNUAL REPORT OF MSMS DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION, 1946

The Annual Report of the Delegates to the American Medical Association will be presented verbally at the first meeting of the MSMS House of Delegates.

ANNUAL REPORT OF THE COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION, 1945-46

The Committee on Postgraduate Medical Education held two meetings during the year 1945-46, the first on January 10, 1946, and the second on June 27. The majority of the Committee members atended these meetings, and communications were received from the members in the Upper Peninsula.

It was decided by the Committee to continue the shortened extramural courses as has been done throughout the war period, reducing the teaching by one-half the number of days and integrating the program with county society meetings, two in the fall and two in the spring, in most of the centers. It is hoped that with the return of a greater number of teachers from military service the program can be restored to its normal length.

It was the opinion of the Committee that the teaching center of Sault Ste. Marie be discontinued until local professional matters have been adjusted. Otherwise the program was given in the same centers in the Upper Peninsula as in former years.

The choice of subjects to be presented in the fall and spring extramural programs was made by the majority of the Committee.

The teaching program for the year 1945-46 was satisfactory to most of the physicians attending. The Committee received several constructive criticisms and will make every effort to meet these suggestions.

It is noteworthy that the postgraduate program, with only slight curtailment, has been maintained throughout the war years. This policy has been most helpful in expanding the program to meet the greatly increased demands for continuing medical education by returning medical officers and civilian physicians which came at the end of the war.

Some of the limitations imposed by war regulations

and conditions have affected the program in various ways. The refusal of the Office of Defense Transportation to permit large meetings prevented the holding of the Annual Medical Conference in October at Ann Arbor. This situation also prevented the Society from offering the annual Postgraduate Industrial Medical and Surgical Conference in Detroit in the spring. The increased teaching load in both medical schools of the state has made it difficult to obtain medical teachers for the extramural centers. Civilian physicians, called upon to render medical services not only to their patients but to those of physicians in the service, were limited in time to attend meetings. It is hoped that many of these limitations will not be encountered next year.

The extramural courses were given in Ann Arbor, Battle Creek, Bay City, Cadillac, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Mt. Clemens, Saginaw, and Traverse City. In the Upper Peninsula, meetings were held in Marquette, Houghton, Ironwood, and Powers.

The subjects presented during the year were:

Autumn, 1945

1. Some Practical Considerations in the Use of Drugs in the Relief of Pain.
2. Acute and Sub-acute Respiratory Infections in Childhood.
3. The Avoidance of Pitfalls in the Diagnosis of Gastrointestinal Complaints.
4. The Management of Breech Deliveries.
5. Genito-urinary Emergencies.
6. The Modern Treatment of Gonorrhea.

Spring, 1946

1. The Differential Diagnosis of Headache. Symposium.
2. Problems of the Returning Veteran. (a) Psychogenic. (b) Medical. With special reference to Tropical Diseases.
3. Menopausal Bleeding.
4. Infectious Mononucleosis. Its Clinical and Laboratory Diagnosis, Complications and Treatment.
5. The early Cardiac Signs of Rheumatic Fever.
6. Empyema and Lung Abscess.

The attendance on the extramural courses in all centers was as follows:

Ann Arbor	107
Battle Creek—Kalamazoo	138
Bay City—Saginaw	126
Flint	135
Grand Rapids	186
Jackson	85
Lansing	87
Mt. Clemens	76
Traverse City—Cadillac	121
Upper Peninsula: Marquette, Houghton, Ironwood, Powers	124
	1185

The affiliation of the teachers on the extramural program is as follows:

Wayne University College of Medicine	16
University of Michigan Medical School	17
Physicians affiliated with the Department of Postgraduate Medicine as Postgraduate Lecturers	13
	46

The report of attendance on the following meetings is given below:

Flint Cancer Day program, March 20, 1946	219
Kent County Day at University Hospital, May 4, 1946	57
Toledo, Ohio, Day at University Hospital, May 15, 1946	29
Rheumatic Fever Conference in Detroit, September 19-20, 1945	249
Traverse City Summer Conference, July 26-7, 1945	67
Ingham County Annual Clinic, May 2, 1946	175
	796

The Michigan State Medical Society granted sixty-five Certificates of Fellowship in Postgraduate Education in September, 1945.

Intramural Activities

University of Michigan Medical School

With the return to peacetime conditions, it has become necessary to increase the number and length of intramural postgraduate courses. Accordingly, a six months' course designed to provide a review of medicine was offered at the University of Michigan Medical School to returning medical officers and civilian physicians. The course was divided into three sections of two months each, as follows: (a) "Clinical Application of the Basic Sciences." January 7-March 2; (b) "Internal Medicine." March 4-April 27; (c) "Course for Practitioners." April 29-June 21.

The brief, intensive review courses that have been offered for many years in the clinical departments of the University Medical School were given during the spring. These courses were three days to one week in length and were given consecutively so that physicians could arrange to attend the entire series.

All the courses were much in demand and were filled to capacity. The registration in each course is given below:

Intensive Review Courses for Returning Medical Officers and Civilian Physicians	195
A. Clinical Application of the Basic Sciences	60
B. Internal Medicine	82
C. Course for Practitioners	53
	195
Allergy	28
Anatomy	58
Clinical Exercises for Practitioners	26
Clinical Internal Medicine (2)	45
Diseases of the Blood	26
Diseases of the Heart	48
Electrocardiographic Diagnosis	74
Endocrinology and Metabolism	33
Gastroenterology	30
Ophthalmology and Otolaryngology	90
Pediatrics	32
Roentgenology, Diagnostic	36
Therapeutics	36
American College of Physicians	
Diseases of the Chest	38
Internal Medicine	55
Personal courses (Residents, and miscellaneous registrations)	136
Foreign physicians	24
	1,010

The registration in the above courses increased 622 over the previous year. The total number of physicians attending is 677, of whom 315 were veterans. Many of the physicians registered for two or more courses, and a large number took the three refresher courses of two months each designed primarily for returning servicemen.

Postgraduate Continuation Curriculum, Wayne University College of Medicine

July to December, 1945

During this period a large number of courses were offered in the Postgraduate Continuation Curriculum and there were fifty-three registered for these courses in this interval.

January to March, 1946

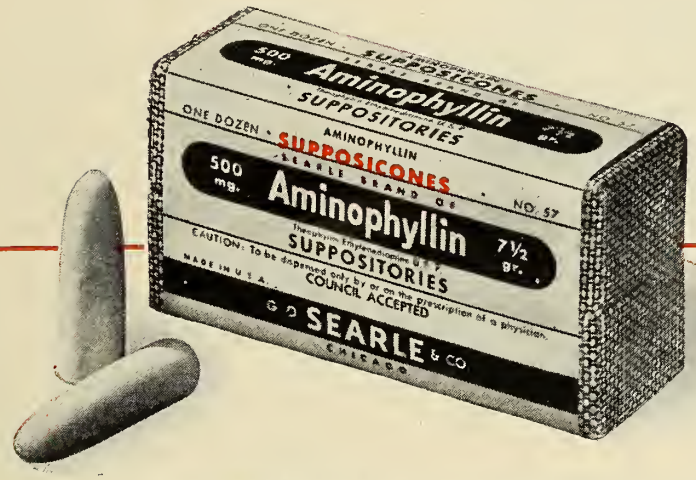
The total registration in the Continuation Curriculum in this period was divided as follows:

Internal Medicine	41
Pharmacology	5
Proctology	4
Anatomy	33
Chemistry	9
Ophthalmology	16
Dermatology	9
Immunology and Virology	2
Pathology	4
	123

(Continued on Page 1102)

SEARLE RESEARCH

has produced an improved AMINOPHYLLIN SUPPOSITORY



AMINOPHYLLIN
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Searle brand of
AMINOPHYLLIN
SUPPOSITORIES

This new suppository—known as the Searle Aminophyllin Supposicone—has these advantages:

1. It remains stable outside the body at temperatures up to 130° F.
2. It liquefies rapidly inside the rectum at normal body temperature.
3. It is nonirritating to the rectal mucosa; no anesthetic is required.
4. It provides an excellent vehicle for prolonged medication.
5. It contains 500 mg. (7½ gr.) of Searle Aminophyllin, having at least 80% of anhydrous theophyllin.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

Supposicone is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Say you saw it in the Journal of the Michigan State Medical Society

(Continued from Page 1100)

Unit Refresher Courses.—Unit Refresher Courses in Proctology, Ophthalmology, and Dermatology were initiated during this period.

April to June, 1946

The total registration in the Continuation Curriculum during this period was divided as follows:

Anatomy	58
Bacteriology	9
Surgery	8
Pathology	98
Pharmacology	4
Physiology	27
Chemistry	23
Internal Medicine	35
Dermatology	5
Proctology	7
Basic Ophthalmology	13
	287

Unit Refresher Courses.—During this quarter the second half of the unit refresher course in Basic Ophthalmology was given with thirteen enrolled, and a repetition of the four weeks' course in Proctology with seven enrolled. Also repeated was the four weeks' course in Dermatology with two enrolled.

The total registrations during the year 1945-46 in the Postgraduate Continuation Curriculum at Wayne University were 463, of whom a large percentage were those of returning veterans. These courses are separate from the Graduate Medical Program which is organized through the Graduate School of Wayne University.

All postgraduate activities for the year 1945-46 were greatly increased in both medical schools of the State. The heavy registration of medical veterans' accounts for fully half of the increase. We are preparing to repeat this fall the special courses designed for returning medical officers and although the numbers will probably not be so great, it is anticipated that within two years the physicians who took their medical training under the Army and Navy plans will be clamoring for internships and residencies in the hospitals of the State and for continuation, refresher, and intramural courses to prepare themselves for civilian practice or a continuation of special training in the various fields of medicine.

The Committee wishes to thank the forty-six teachers who took time from their busy practices and medical school duties to carry the program to the different centers of the State. This spirit has helped to make the Michigan plan of postgraduate medical education one of the best in the country, and with continued support from the membership of the Michigan State Medical Society it will continue to grow and serve the people of the State.

Respectfully submitted,
JAMES D. BRUCE, M.D., *Chairman Emeritus*
H. H. CUMMINGS, M.D., *Chairman*
C. F. BRUNK, M.D.
C. P. DRURY, M.D.
W. B. FILLINGER, M.D.
A. C. FURSTENBERG, M.D.
C. L. HESS, M.D.
R. H. HOLMES, M.D.
H. A. KEMP, M.D.
R. H. PINO, M.D.
J. M. ROBB, M.D.
W. R. TORGERSON, M.D.
J. J. WALCH, M.D.

ANNUAL REPORT OF COMMITTEE ON RHEUMATIC FEVER CONTROL, 1945-46

The annual report of this Committee will be presented verbally to the MSMS House of Delegates at its first meeting, on September 22, 1946.

Respectfully submitted,
L. FERNALD FOSTER, M.D., *Chairman*
CARLETON DEAN, M.D.
H. H. RIECKER, M.D.
FRANK VAN SCHOICK, M.D.
PERCY C. ANGOVE

PROGRAM OF MOTION PICTURES

(Continued from Page 1078)

Arterial Blood Pressure

(Color and sound—projection time—35 minutes)

Arterial blood pressure, its theory, physics and measurement. This film is designed to demonstrate the manner of keeping both aneroid and mercurial instruments in proper working order. The physics of blood pressure is developed at great length together with important research problems, explaining the theory of the sounds picked up by the stethoscope. Anomalies, such as auricular fibrillation, premature beats, coarctation of the aorta are identified. Facts of hypertension and hypotension are dealt with from the theoretical as well as the practical phases. Produced for the medical profession at large, medical schools in particular.

Management of Hypothyroidism

(Color and sound—projection time—35 minutes)

Differential diagnosis discusses variations between hyperthyroidism and hypothyroidism. The essential clinical entities of hypothyroidism such as cretinism, juvenile, adult and pituitary myxedema are dealt with in great detail, with typical patients shown. Effect on the metabolism is depicted pharmacologically and clinically, by tests on animals to the cumulative effect on the patient. The recommended therapy to restore the patient to normal is analyzed thoroughly.

Management of the Failing Heart

(Color and sound—projection time—35 minutes)

Impairment of heart function due to auricular fibrillation, constrictive pericarditis, pericardial effusion, and effects on the respiratory system are shown. The management of the patient in heart failure shows how salt restriction maintains the extracellular fluid in proper balance to reduce edema. Effects of mercurial diuretics and new potent digitalis derivatives are evaluated.

PANEL DISCUSSION—EYE, EAR, NOSE AND THROAT

You are cordially invited to attend the Association of Military Surgeons Eye, Ear, Nose and Throat Panel Discussion, to be presented October 11, 1946, in the English Room, Statler Hotel, Detroit, Michigan.

At the morning session, beginning at nine o'clock, the following speakers will appear on the program: Comdr. A. Duane Beam, MC, USNR, Detroit—"Traumatic Injuries of the Eyes and Their Repair;" Lt.-Col. James N. Greear, MC, AUS, Washington, D. C.—"Rehabilitation of the Blind;" Lt.-Col. Gilbert C. Struble, MC, AUS, Valley Forge General Hospital, Phoenixville, Pa.—"Repair of Eye Injuries." (Movie); Lt.-Col. E. L. Shiflett, MC, AUS, William Beaumont General Hospital, El Paso—"X-Ray Reconstruction of Orbit as an Aid to Surgical Reconstruction;" Lt.-Col. Ben H. Senturia, MC, AUS, St. Louis—"Ear Plugs for the Prevention of Deafness;" Lt.-Col. Edmund P. Fowler, MC, AUS, New York City—"Irradiation of the Eustachian Tubes."

The afternoon session beginning at 2:00 p.m., will include: Lt.-Col. Mercer G. Lynch, MC, AUS, New Orleans—"Laryngeal Injuries and Their Repair;" Capt. Francis L. Lederer, MC, USNR, Chicago—"Rehabilitation of the Deaf in the Navy;" Lt.-Col. Frank D. Lathrop, MC, AUS, Boston—"Facial Nerve Repair Due to War Injury;" Dr. Julius Lempert, New York City (by invitation)—"Lempert Fenestra Novovalis Operation for the Restoration of Practical Serviceable Hearing in Clinical Otosclerosis." (Motion picture of technique).

Mothers and Babies Just Stand up and Cheer About Baby Quaker



And you can appreciate this cereal's Mother's Oats benefits, fortified and processed for earliest cereal feeding

Seriously . . . it's easy to understand the approval which has greeted the arrival of Baby Quaker. Here are all the body-building, whole-grain qualities of genuine Mother's Oats (Mother's Oats and Quaker Oats are the same), fortified with extra vitamins and minerals, and especially processed for infant digestion. Babies take to its strained smoothness . . . and mothers appreciate the precooking, which means they need add only warm milk or formula. Full technical information furnished upon request.

TYPICAL ANALYSIS

Protein	15.3%		Per Ounce
Fat	6.8%	Calcium	216 mg.
Carbohydrate	65.1%	Phosphorus	278 mg.
Fiber	1.9%	Iron	6.6 mg.
Minerals (ash)	4.7%	Thiamine	0.3 mg.
	Per Ounce	Riboflavin	0.051 mg.
Calories	108	Niacin	0.41 mg.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

We're telling mothers to ask you about the Mother's Oats benefits of this new baby cereal. (Mother's Oats and Quaker Oats are the same.)

BABY QUAKER INSTANT STRAINED OATMEAL

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

NUMBER OF DEATHS FROM TUBERCULOSIS IN MICHIGAN IN 1945 WITH PROPORTIONATE MORTALTY BY SEX AND AGE

The following analysis of deaths from tuberculosis for 1945 will be of value to all those interested in tuberculosis control. The 1945 table giving tuberculosis deaths, death rates and new cases and counties will be ready to distribute with the next circular.

Age in Years	Number of Deaths from Tuberculosis		Ratio per 100 Deaths from All Causes	
	Male	Female	Male	Female
Under 1	8	5	.36	.28
1	13	12	7.39	8.39
2	4	6	3.15	7.59
3	1	6	1.67	10.17
4	1	3	1.43	6.00
Under 5	27	32	1.01	1.52
5-9	2	6	.85	4.38
10-14	5	18	2.58	14.63
15-19	26	54	8.18	22.98
20-24	61	109	16.53	31.78
25-29	74	92	17.92	23.65
30-34	96	67	17.49	14.32
35-39	107	58	14.12	9.60
40-44	102	34	9.30	4.46
45-49	114	34	7.20	3.44
50-54	135	23	5.88	1.70
55-59	134	20	4.48	1.19
60-64	109	17	3.45	.87
65-69	82	16	2.46	.67
70-74	45	17	1.35	.62
75-79	16	11	.50	.39
80-84	7	4	.32	.18
85 and over	3	0	.18	.00
Unknown	0	1	....	....
Total	1,145	613	3.77	2.64

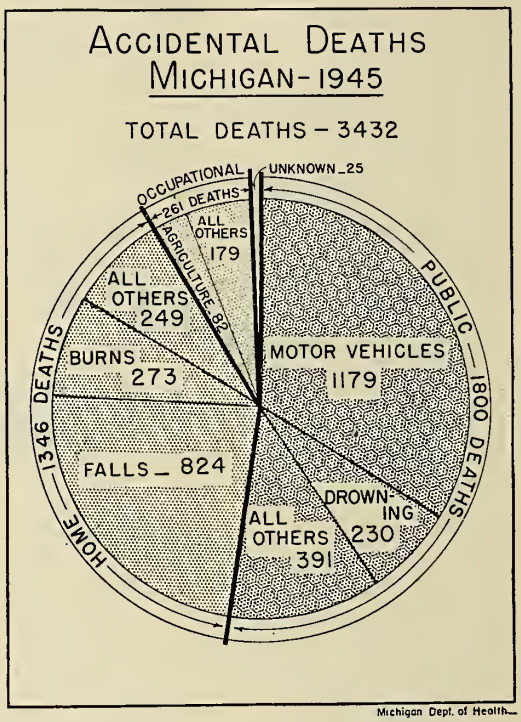
INCIDENCE OF COMMUNICABLE DISEASE

Disease	June, 1946	June, 1945	7-Year Median
Diphtheria	16	51	23
Gonorrhea	943	1,045	718
Lobar Pneumonia	52	98	147
Measles	1,908	991	1,437
Meningococcic Meningitis	10	29	3
Pertussis	514	210	809
Poliomyelitis	4	3	4
Scarlet Fever	418	768	672
Syphilis	1,437	1,284	1,284
Tuberculosis	418	568	568
Typhoid Fever	6	7	8
Undulant Fever	13	40	14
Smallpox	0	0	3

RAPID TREATMENT CENTER COMPLETES TWO YEARS

In the two years since the Michigan Rapid Treatment Center for venereal disease patients opened in Ann Arbor on July 5, 1944, it has given treatment to 4,660 patients.

The Rapid Treatment Center, operated by the Michigan Department of Health and the U. S. Public Health Service, offers treatment for early syphilis to patients who are unable to pay for private medical care. Cases are accepted at the Center only on referral of a physician. This is one of fifty-six such centers established by the federal government in the United States to offer intensive treatment for venereal disease.



The Michigan Rapid Treatment Center has accommodations for forty female patients and sixty male. The majority of its patients are between twenty and twenty-nine years of age and 60 per cent are male.

PUBLIC HEALTH CONFERENCE

The twenty-sixth annual Michigan Public Health Conference is scheduled for the Pantlind Hotel, Grand Rapids, Oct. 30-Nov. 1, 1946.

DROWNINGS IN MICHIGAN

July is the peak month for drownings in Michigan. Of the 241 deaths by drowning reported in the state last year, seventy-five occurred in July. The vacation months of June, July and August account for two-thirds of all drownings.

Eighty-six per cent of the drowning accidents occur among males. Of the 1,407 persons drowned in Michigan during the past five years, 1,209 were males.

Among males the largest number of drownings (30 per cent of the total) occurred in the ten to nineteen age group. Among females the peak age was five to fourteen years.

For National Rehabilitation



Yes, it's a fact . . .

in addition to its refreshing quality and its flavor, ice cream contains many important health-giving food elements. It contains the following nutrients:

Vitamins. Ice Cream is a good source of Vitamin A and Riboflavin (Vitamin G) and contains other vitamins found in milk.

Minerals. Calcium, necessary for strong bones and teeth, is supplied abundantly by Ice Cream.

Proteins. Ice Cream provides high-quality proteins . . . those found in milk.

All of these nutrients promote health and well being.

And remember, the particular combination of nutrients found in Ice Cream is unusual. This is one reason why Ice Cream is accorded such an important role in our national rehabilitation program.

"Ice Cream—Composition-Manufacture-Food Value" an interesting, factual leaflet will be sent free on request. Write: National Dairy Council, Dept. P 846, 111 North Canal St., Chicago 6, Illinois.

EST 1916 NATIONAL DAIRY COUNCIL

NATIONAL DAIRY COUNCIL

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A non-profit, educational organization promating natianal health thraugh a better understanding of dairy foods and their use.

Woman's Auxiliary

ANNUAL STATE CONVENTION

The Woman's Auxiliary to the Michigan State Medical Society will hold its twentieth annual session in Detroit, September 24, 25 and 26. We extend a most sincere invitation to all members of the Auxiliary and to wives and guests of doctors attending the session who are not members to attend the general session and all social events. A friendly welcome will be given to everyone.

Headquarters will be at the Statler Hotel. Room reservation cards are now in the hands of your County President. Get yours today and mail at once to the hotel.

Please register early and obtain your badge and complete program.

Members of the Hospitality Committee will be at the hotel to assist you in every way.

An Invitation

When you come to convention—and surely you ARE coming to convention—do stop in the Hospitality Room to chat with your friends, meet auxiliary members from all over the state, and look for the members of the Hospitality Committee who are anxious to help you make this the most memorable convention you have ever attended.

Would you like to know the places of interest to visit in Detroit—where to eat—where to shop for certain articles—or how to reach a given address? Ask your Hospitality Committee—they will be glad to be of assistance to you.

Do you plan to see a show? The committee will send each county president, in August, a list of the road shows that will be in Detroit at convention time. We suggest that you call your president for this information and write the theater for tickets early in September. Should you decide to attend after reaching Detroit, the committee will try to help you secure tickets.

We are looking forward to seeing you at the convention—look for us in the Hospitality Room.

The Hospitality Committee
Lela French,
Irene Whitney,
Co-chairmen.

Correspondence

June 10, 1946

Dr. L. Fernald Foster
Secretary, Michigan State Medical Society
2020 Olds Tower
Lansing, Michigan

Dear Dr. Foster:

For practical purposes the functions of the Procurement and Assignment Service have been terminated and the activities of the several state offices brought to a close. The success of the program in meeting the needs of the armed forces without sacrificing the civilian population may be attributed directly to the patient and timeless devotion of many state committees and countless local advisers. Many of these committeemen and advisers are unknown to the Directing Board, except through the results of their efforts, and it would obviously not be practicable to undertake to communicate with them.

In a recent letter to each state chairman, I asked that the appreciation of the Directing Board be conveyed to all the state and local representatives whose full cooperation was essential to the ultimate achievement. The Directing Board, at its final meeting on May 17, 1946, resolved that the untiring efforts, kind tolerance, and successful accomplishment of these state committee members and local advisers be commended to the appropriate professional state society for suitable recognition by the society.

I hope you will draw this recommendation to the attention of your society, and that they will be disposed to afford some such recognition.

Sincerely yours,

Frank H. Lahey, M.D.
Chairman, Directing Board
Procurement and Assignment
Service, Federal Security
Agency, Washington, D.C.

FAMOUS MEDICAL ART WORKS ON DISPLAY AT HUDSON'S, SEPTEMBER-OCTOBER

Members and their wives who attend the Society's Annual Assembly in Detroit, September 25, 26 and 27, will have an opportunity to view an exhibition of three groups of famous paintings and drawings depicting medical history and development, in the Fine Arts Galleries of the J. L. Hudson Company, on their eleventh floor.

The three groups of paintings are the work of three contemporary American artists—Dean Cornwell, Rockwell Kent and James Chapin. Cornwell has done a series of six unusual paintings for Wyeth, Inc., Philadelphia. The series of six paintings entitled "Pioneers of American Medicine" have been painted since 1939—one each year. For Schering Corporation, Rockwell Kent has done a series of six drawings conceived as an expression of the mental symptoms of various diseases. For Ciba Pharmaceutical Products, Inc., Summit, N. J., James Chapin has done a group of seven paintings known as "The Seven Ages of a Physician." They have been designed as a tribute to the science of healing and to those great men of medicine whose devout selflessness has had an almost religious significance.

The three groups will be shown simultaneously at Hudson's, and following the convention of the Society, they will remain hanging for the October assemblies of the Military Surgeons, October 9, 10 and 11, and of the United States Chapter, International College of Surgeons, October 21, 22 and 23.



Council Accepted

Parenamine, Amino Acids Stearns, an acid hydrolysate developed and perfected by Stearns Research... A sterile, pyrogen-free solution of *all the amino acids* known to be indispensable to humans.

Extensive clinical use* has established the value of Parenamine in preventing and correcting hypoproteinemia and maintaining positive nitrogen balance.

Parenamine

Parenteral Amino Acids

For Protein Deficiency

COMPOSITION: Derived from casein by acid hydrolysis and fortified with pure *dl*-tryptophane, Parenamine is a sterile 15 per cent solution of all the amino acids known to be essential for humans.

INDICATED in conditions of restricted intake, faulty absorption, increased need, or excessive loss of proteins—as in preoperative and postoperative management, extensive burns, delayed healing, gastro-intestinal disorders, fevers, et cetera.



ADMINISTRATION may be intravenous, intrasternal, or subcutaneous.

SUPPLIED in 100 cc. rubber-capped bottles.

**Reprints and complete clinical data on request.*

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Trade-Mark *Parenamine* Reg. U. S. Pat. Off.

What's What

Roy D. McClure, M.D., Detroit, has been elected as a member of the Board of Trustees of the Michigan Foundation for Medical and Health Education, Inc., to fill the unexpired term of the late Rollin H. Stevens, M.D.

* * *

The American Congress of Physical Medicine will hold its 24th scientific session at Hotel Pennsylvania in New York, September 4, 5, 6, 7, 1946. For information address the Congress at 30 N. Michigan Ave., Chicago 2.

* * *

J. Duane Miller, M.D., Grand Rapids, has been appointed as Councilor of the Fifth District to fill the unexpired term of A. B. Smith, M.D., who resigned in May. The Fifth Councilor District comprises the counties of Kent, Barry, Ionia-Montcalm, and Ottawa.

* * *

The Illinois State Medical Society has negotiated a "home-town medical care program for veterans" with the Veterans Administration following the pattern set by the Michigan State Medical Society last December, according to news releases of June 28.

* * *

Physician's emblem for automobile windshields, in three-color decalcomanias, is available without cost to every member of the Michigan State Medical Society. The Van Patten Pharmaceutical Company, 510 North Dearborn, Chicago, Illinois, is supplying these decals to physicians, with its compliments.

* * *

The Michigan Pathological Society met at The Grace Hospital with Dr. C. I. Owen as host on Saturday, June 8. A seminar was conducted on "Diseases of the Kidney" by Dr. E. T. Bell, Professor of Pathology, University of Minnesota. Cases were presented by Dr. Bell and by members of the Society.

* * *

The Veterans Administration announces opportunities to doctors of medicine for positions in physical administration in V.A. hospitals and regional offices. For further information contact Ver Lynn Sprague, Executive Officer, Medical Rehabilitation, Branch Office No. 6 (Michigan, Ohio & Kentucky), 52 S. Starling St., Columbus 8, Ohio.

* * *

Donald J. Jaffar, M.D., Detroit, won the 1946 golf championship of the Wayne County Medical Society, held at Lochmoor Club on August 7, with a gross score of 76 for 18 holes. Dr. Jaffar's name will be placed on the Holmes Championship Trophy for the second time.

INTERNATIONAL SURGICAL ASSEMBLY

UNITED STATES CHAPTER, INTERNATIONAL COLLEGE OF SURGEONS

MASONIC TEMPLE, DETROIT, OCTOBER 21, 22, 23, 1946

President, Herbert Acuff, Knoxville, Tenn. President-Elect Custis Lee Hall, Washington, D. C., Secretary & Chairman Detroit Assembly, L. J. Gariepy, 16401 Grand River Avenue, Detroit 27.

ALL MEDICAL MEN AND WOMEN IN GOOD STANDING CORDIALLY INVITED

Intensive Clinical and Didactic Program by World Authorities

Operative Surgical Clinics, Monday morning, October 21 in seventeen Detroit hospitals.

Convocation Speakers: Former Ambassador to Japan Joseph C. Grew, Congressman George A. Dondero from Michigan.

Banquet Speakers: Fleet Admiral Chester W. Nimitz, Vice Admiral Ross T. McIntire, Surg. Gen. Navy, and Morris Fishbein, M.D.

The following is list of members of the profession who will take part in program:

Lyon H. Appleby, Vancouver, B. C.	David deSanson, Rio de Janeiro, Brazil	Lowrain E. McCrea, Philadelphia
Hamilton Bailey, London, Eng.	Francisco Grana, Lima, Peru	Raymond W. McNealy, Chicago
W. Wayne Babcock, Philadelphia	J. P. Greenhill, Chicago, Ill.	Karl A. Meyer, Chicago
Harry E. Bacon, Philadelphia	E. S. Gurdjian, Detroit	J. H. Mulholland, New York
Channing W. Barrett, Chicago	Custis Lee Hall, Washington, D. C.	Rudolf Nissen, New York
Moses Behrend, Philadelphia	Stuart W. Harrington, Rochester, Minn.	Richard H. Overholt, Brookline, Mass.
A. A. Berg, New York	Rudolph Jaeger, Philadelphia	Col. John F. Pick, Chicago, Ill.
Prof. J. Bitschai, Cairo, Egypt	Albert Jirasek, Prague, Czechoslovakia	Carl A. Rosenbaum, Little Rock, Ark.
Gerald L. Burke, Vancouver, B. C.	Charles G. Johnston, Detroit	Max Thorek, Chicago, Ill.
Sebastian J. Carnazzo, Omaha, Nebr.	Wm. E. Johnston, Detroit	Harold C. Voris, Chicago, Ill.
Felipe Carranza, Buenos Aires, Argentina	Herbert I. Kallet, Detroit	Robertson Ward, San Francisco
	Roland M. Klemme, St. Louis	James M. Winfield, Detroit
Alejandro Ceballos, Buenos Aires, Argentina	Lloyd G. Lewis, Baltimore	Otis R. Wolfe, Marshalltown, Iowa
	Wm. C. MacCarty, Rochester, Minn.	Edwin L. Zander, New Orleans

Hotel Headquarters: Book-Cadillac Hotel and Statler Hotel. FOR HOTEL RESERVATIONS, write C. W. Husband, Chairman, Housing Committee, 1005 Stroh Bldg., Detroit 26, Mich.

Any doctor of medicine who uses surgery in his practice will find this meeting of great value.
A program will be mailed to every member of the medical profession in good standing in the United States and Canada, upon request to the Secretary, about October 1.
COMPREHENSIVE SCIENTIFIC AND TECHNICAL EXHIBIT. SPECIAL ENTERTAINMENT FOR THE LADIES.

COSEASONAL TREATMENT OF HAY FEVER

Worthwhile relief can be obtained in a large percentage of pollinosis cases if hyposensitization treatment is begun on manifestation of symptoms.

Coseasonal treatment offers the added benefit of helping to establish the patient's tolerance to the specific pollen sensitivities. This aids in preparing the way for perennial treatment which, it is estimated, affords relief to 80 to 90 per cent of sufferers.

CONVENIENCE AND SIMPLICITY

The *Arlington* POLLEN TREATMENT SET is designed to conveniently facilitate hyposensitization. Each treatment set contains five 3-cc. vials of graduated dilutions (1:10,000, 1:5,000, 1:1,000, 1:500, and 1:100) of pollen antigen, especially prepared to cover the patient's individual pollen sensitivities.



ARLINGTON POLLEN TREATMENT SET $7.50

THE ARLINGTON CHEMICAL COMPANY

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A Symbol of Many Things You Cannot See

THE dictionary defines label as "a duly protected mark, registered, as by a store, to distinguish its goods." The Whaling label means even more than that. It has come to stand as a symbol, not only of fine apparel, but also for those hidden but important things these goods represent. This label reflects, too, our reputation for straightforward dealing, dependability and courtesy.

WHALING'S
MEN'S WEAR • 617 WOODWARD
DETROIT 26 • MICHIGAN

Wayne University School of Occupational Health offers an orientation course of fifteen weeks in occupational health and medicine beginning September 9, 1946. Enrollment is limited to twenty-five students. For full information address the Dean, 1547 Penobscot Bldg., Detroit 26.

* * *

Harry F. Becker, M.D., talked on political medicine to the Marshall Rotary Club on July 1, giving the members an object lesson in what the Wagner-Murray-Dingell bill actually means. He found the club amazed at what he told them and at his stories of compulsory medical care and its abuses. The club voted to send a telegram to the Senate Committee on Education and Labor, protesting against the bill.

* * *

George F. Lull, M.D., former deputy surgeon general of the U. S. Army, was officially inducted as the new secretary-general manager of the American Medical Association at the AMA Session in San Francisco, July 4, 1946. Doctor Lull succeeds Olin West, M.D., longtime secretary-general manager of the AMA, who was signally honored by being chosen as president-elect of the Association by the 1946 House of Delegates.

Congratulations Doctors Lull and West!

* * *

Order hotel reservations today.—The Michigan State Medical Society Annual Session will be held in Detroit in 1946. The House of Delegates Session will meet Sunday, Monday, Tuesday, September 22, 23, 24. The Scientific Assemblies and section meetings will be held Wednesday, Thursday, Friday, September 25, 26, 27, 1946.

For hotel accommodations write E. C. Texter, M.D., Chairman Housing Committee, 1005 Stroh Bldg., Detroit 26, Michigan.

* * *

Captain Manley J. Capron, M.C., USNR, received the following citation from the navy recently: "For excellent service in the line of his profession as Chief of Medicine, United States Naval Hospital, Aiea Heights, T. H., from 12 April, 1944, to 27 June, 1945. He administered and directed the care and treatment of a large number of medical cases, many of which were critical or serious cases of malaria, dysentery, and bizarre tropical diseases. He proved himself to be a very highly trained internist and by his outstanding ability, secured the highest cooperation from his large group of departmental specialists, and was responsible for the saving of many lives. His conduct was at all times in keeping with the highest traditions of the United States Naval Service."

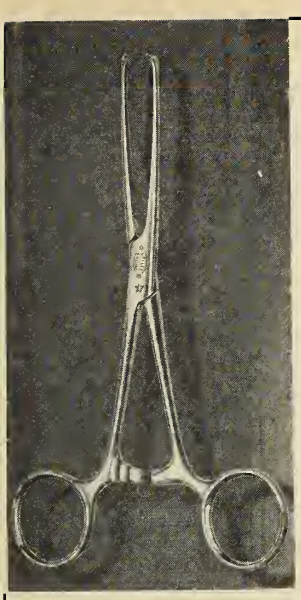
* * *

SEVENTEEN OPERATIVE SURGICAL CLINICS AT DETROIT ASSEMBLY, I. C. OF S.

Operative surgical clinics in seventeen Detroit hospitals will be featured the first morning of the Eleventh Assembly of the United States Chapter, International College of Surgeons, to be held in Detroit, October 21, 22, 23, 1946.

Special arrangements have been made to demonstrate the advances in gastric, thoracic, biliary, intestinal, genito-urinary, and plastic surgery. The various specialties, such as ophthalmology, otolaryngology, and

(Continued on Page 1116)



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(Continued from Page 1114)

gynecology, the modern treatment of burns, fractures, and modern uses of wire in surgery will be featured.

During the balance of the three-day Assembly, thirty-two internationally known speakers will deliver twenty minute surgical talks in Detroit's Masonic Temple.

The colorful and pageant-like Convocation will be held in the Masonic Temple Auditorium, seating 6,000, Tuesday evening, October 22. Former U. S. Ambassador to Japan Joseph C. Grew will deliver the Convocation address.

For information concerning the Detroit Assembly or the primary qualifications for Fellowship in the United States Chapter, International College of Surgeons, write Secretary L. J. Gariepy, M.D., 16401 Grand River Avenue, Detroit 27, Michigan.

* * *

Drugs to be Sold on Prescription Only.—There may be many drugs which should be sold on prescription only because of the danger involved in their indiscriminate use. The U. S. Food and Drug Administration has expressed the opinion that the sale of the following should be confined to prescriptions:

Aconite
Aminopyrine
Barbiturates
Benzedrine sulphate (for internal use)
Cantharides (for internal use)
Chrysarobin
Chrysophanic acid
Cinchopben and its related compounds
Colchicine
Colchicum
Emetine
Phenol and Camphor (in undiluted eutectic mixtures)
Phosphides
Phosphorus
Radium
Sulfanilimide and related compounds
The anthelmintic drugs:
Carbon Tetrachloride
Oil Chenopodium
Male Fern (aspidium)
Santonin
Tansy Oil
Tetrachlorethylene
Thiocyanates
Thymol
Thyroid
Products containing therapeutical effective proportions of:
Digitalis
Squill
Strophanthus
or other pharmacologically related drugs.

Dangerous Dosages.—The opinion was expressed that preparations containing the following should not be sold except on prescription if the dosage exceeds the quantity stated in the time limit indicated.

Acetanilid	5 grains daily, 2½ in any 3 hour period.
Acetophenetidin and Antipyrine	Evidence shows that more than 15 grains daily may be unsafe for indiscriminate use.
Bromides-Acetanilid combinations	30 grains daily, 15 grains in any 3 hours. 15 grains bromides, 5 grains acetanilid daily 7½ grains bromides, 2½ acetanilid in any 3 hours.
Epinephrine solutions	Strength of 1% or over unsafe for indiscriminate use.
Ipecac	Daily dose should not exceed 10 grains.
Mercuric chloride (.2%) and Ammon. Mercury (5%)	Preparations for external use containing more than the amounts indicated may be unsafe.
Strychnine	Daily dose should not exceed 1/20 grain.

Prescription Refills.—The opinion has also been expressed that prescriptions for dangerous drugs should not be refilled. The fact that the pharmacist has dispensed a drug on prescription does not warrant its refill without permission of the physician even though it is not marked as not to be refilled.

* * *

"Michigan sets pace in Vet Care."—The following editorial was published in the Milwaukee Medical Times, the very creditable publication of the Milwaukee County Medical Society, Wisconsin. Editor Robert W. Blum-

(Continued on Page 1118)

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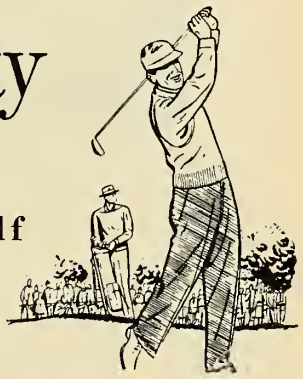


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(Continued from Page 1116)

enthal, M.D., expressed himself concerning Michigan's "Home-Town Medical Care Program for Veterans" as follows:

"Readers of *Collier's* magazine (and there are over 2,800,000 of them) got a good graphic picture of what Michigan doctors are doing to see that the veteran gets what they believe he is entitled to—the best of medical care by the doctor of his choice *sans* red tape and delay.

"Illustrated by a series of eight clever cartoons by Carl Rose, the article, which appeared in the May 11 issue, is written in man-on-the-street, this-might-be-your-boy fashion and has a wide reader appeal.

"It uses a contrast between the old method of treatment under the Veterans Administration, where the unfortunate vet travels miles to be put off and treated as a case number, and the Michigan Plan. Under the latter he contacts the Veterans Administration for authorization of treatment, the matter is handled between the VA and Michigan Medical Service and all goes smoothly, the vet receiving the kindly, personal attention of his family doctor.

"The article goes on to tell in a graphic fashion of the motivating force lent the project by the dynamic personality and the determination to get-the-job-done of General Paul R. Hawley. Another hero of the recital is Jay Ketchum of Michigan Medical Service, one of the biggest figures in prepayment medicine. Ketchum is well known to Milwaukee physicians as the speaker at our 1944 annual meeting, when he gave an inspiring talk on Michigan Medical Service. At that time Surgical Care, which was originally patterned after the Michigan plan, was in its infancy, having just a few months before graduated from the experimental stage when it was limited to the employes of one firm. Today Michigan Medical Service, a pioneer in the prepayment field, has taken on what may prove to be almost as big a job—the liaison between the Veterans Administration and the doctors for the care of Michigan's veterans with service-connected disabilities. Michigan is again leading the nation in a professionally sponsored undertaking to make high-quality medical care readily available without financial pinch.

"The *Collier's* article traces the idea back to the Monmouth County, N. J., original plan for caring for relief cases back in the depression years of the 30's. The Monmouth County doctors wondered why such a plan would not work out as a solution for the out-patient veteran problem. It was obvious that such a solution was badly needed. When General Hawley issued his ultimatum before the Rhode Island State Medical Society on February 4, 1946, there was a backlog of 500,000 service-connected disability cases waiting to be cleared through the Veterans Administration. According to the Collier's writer, what General Hawley had to say to the Rhode Island doctors had an electrifying effect. Pulling no punches, he addressed the doctors as follows:

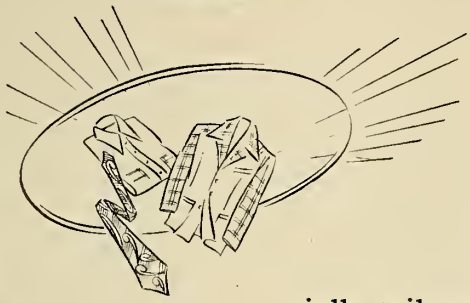
"In so far as medical care of the veteran is concerned, I'm going to give the veteran the best medical care in the world—or else! The medical profession must support this program and help me give this to the veteran—or else! And in the case of the medical profession, the "or else" is state medicine.' In that same address, General Hawley pledged himself 'neither to abandon the veteran to selfish interests, nor by betraying the profession of medicine in an effort to build an empire of federal medicine.'

"It has been clear from the beginning that a well-organized liaison to represent the doctors was what was

(Continued on Page 1120)

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(Continued from Page 1118)

needed if the principles of good medical care and free choice of physician were to be safeguarded in such a plan for out-patient care. The Michigan prepayment plan was founded on these principles and dedicated to their preservation so that a more desirable liaison could hardly be imagined. There is no doubt that the job, for Michigan, as for every other state, will be a big one, and it will take a well-organized and powerful agent to handle the job effectively. The veterans of Michigan are fortunate in having an organization like the Michigan Medical Service both willing and prepared to serve their best interests. The doctors of Michigan are to be congratulated on their enterprising spirit and their qualities of leadership which today are serving the American most deserving to benefit from the doctor's skill and science—the veteran."

* * *

Four Michigan physicians won prizes at the eighth Annual Exhibition of the American Physicians Art Association held in San Francisco, July 1 to 5, 1946.

Constantine Oden, M.D., Muskegon, was awarded First Prize in Photography, Class B, those with three to eight years' experience, for his entry entitled "Mary Lind." Doctor Oden also won honorable mention for his entry "Portrait of an Artist" in the same competition.

G. Clare Bishop, M.D., Almont, competing in Photography, Class C, those with eight months' to three years' experience, won Second Prize for his entry "Sponge Diver."

M. B. Llewellyn, M.D., Detroit, won a Second Prize award in the Needlework competition for his "Llewellyn Coat of Arms."

Arthur L. Stanley, M.D., Lansing, entered a wood carving of a human skeleton which won Second Place award, in the wood carving competition.

Hermann Pinkus, M.D., Monroe, won honorable mention for his entry entitled "At the Old Water Wheel" in the color photography contest.

The American Physicians Art Association is sponsored by Mead Johnson & Company, Evansville, Indiana.

* * *

The third annual summer conference for Veterans' counselors was held July 11, 12, and 13, 1946 at the Michigan Veterans' Vocational School, Pine Lake, Michigan. The program consisted of general assemblies addresses, progress reports, recreation conferences and panel discussions on various topics of the veterans' rehabilitation program of Michigan.

Friday afternoon, the panel discussion from 1:30 p.m. to 3:30 was on "New Approaches to Hospitalization and Medical Services for Michigan Veterans." The discussion leader was Major Alguire, Chief, Claims and Service Section, Office of Veterans' Affairs. He introduced the various resource persons, giving a little sketch of their contact with veterans' affairs. He outlined the development of the program in Michigan, which he claims is far ahead of all other states in the attention given to veterans' rehabilitation. He told of the active and early interest of the Michigan State Medical Society and that he has never failed to get co-operation and help. He praised the Uniform Fee schedule, saying it had aided materially in getting work done for the veterans without waiting and without searching for some kind hearted doctor willing to work for inadequate pay. He

(Continued on Page 1122)



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(Continued from Page 1120)

said they had never had a doctor refuse care for the veterans without question of pay, but it had been a great satisfaction to be able to offer uniform fees, and adequate ones. The Board is handicapped by the law of the state setting a ceiling for medical services in the crippled children category, but up to that limit the fee schedule is in force.

Mrs. Vesta Sturgis Cullen, Supervisor, Rehabilitation Division, State Board of Control for Vocational Education, told of the establishment of veterans services and courses of training for vocational development. At first, training in some skill was all that could be given, but gradually it has become possible to correct handicaps and physical disabilities.

Major Garnet J. Burlingame, Chief Rehabilitation Section, Office of Veterans' Affairs, told of the technical work of schools and placement of veterans in employment suited to their capacities.

Roger P. Hentz, M.D., Manager, Veterans' Administration Hospital, Fort Custer, told of the work of their hospital, what patients it can take, the need for early treatment of mental cases so as to prevent their becoming fixed. After the first World War about ninety per cent of the neuropsychiatric cases become permanent. During the present war the returns are different. His hospital has taken care of 2,000 NP cases, with only 500 still in the hospital, and many of them will be returned to useful life in due course. About eighty to ninety per cent are recovering under present day care.

Major M. M. Frohlich, Medical Director, Veterans' Readjustment Center, Ann Arbor, told of the new institution with twenty beds (but growing), where problem cases are taken and readjusted to return to useful private life. This work has only been going on for six months, but already over a hundred persons have been rescued from a possibly permanent NP rating.

Major H. C. Mitchell, Chief Medical Officer, Michigan Veterans' Facility, Grand Rapids, told of the work done in his hospital. They take in-patients only, Michigan residents for five years, veterans from any war, and give them full care.

Wilfrid Haughey, M.D., Editor, JOURNAL MSMS and Board of Directors Michigan Medical Service, told of the Michigan Plan for care of the veterans in their own home towns and by their own family doctors. He told of Michigan Medical Service and its contribution. Also of the methods of getting authorization for care of veterans. They must have a service connection for the Veterans Administration care, but the Michigan Office of Veterans' Affairs will take care of emergencies and cases not included under the Veterans Administration.

F. S. Leader, M.D., Director, Bureau of Epidemiology, Michigan Department of Health, told of the new procedure in the care of tuberculosis. The new law of 1945 establishes a state citizenship-at-large for certain veterans, and allows them special privileges in hospitalization.

Major Alguire closed the conference after offering time for questions and answers.

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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

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SYNOPSIS OF PATHOLOGY. By W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology and Bacteriology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee; formerly Associate Professor of Pathology, St. Louis University School of Medicine. With 327 text illustrations and fifteen color plates. St. Louis: C. V. Mosby Company, 1946. Price $6.50.

This volume is a pocket edition as to size of page and limp binding, but 741 pages make it too big for a pocket. It is an intermediate book between the small manuals of pathology, and the large texts. It is intended for ready reference, is up to date and reliable and sufficiently illustrated to make the text understood. The pathology of vitamin deficiencies and disturbances of growth are well worth reading.

* * *

A TEXTBOOK OF GYNECOLOGY. By Arthur Hale Curtis, M.D., Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of Gynecological Service, Passavant Memorial Hospital, Chicago. Fifth Edition. 755 pages with 455 illustrations, chiefly by Tom Jones, including thirty-six in color. Philadelphia and London: W. B. Saunders Company, 1946. Price $8.00.

This fifth edition is much superior to its predecessors. It has been extensively revised and new parts added such as ovarian tumors. It is a complete textbook, describing diseased condition, giving diagnosis and treatment, with many illustrations. Pathology, gross appearance and the steps of surgical procedures are described, as are other methods of treatment: cautery, X-ray, and radium. This book is proper for the student as well as the advanced practitioner.

* * *

A BIBLIOGRAPHY OF INFANTILE PARALYSIS, 1789-1944. With Selected Abstracts and Annotations. Prepared under the Direction of the National Foundation for Infantile Paralysis, Inc. Edited by Morris Fishbein, M.D., Editor, *Journal of the American Medical Association*. Compiled by Ludwig Hektoen, M.D., Chief Editor, *Archives of Pathology*, and Ella M. Salmonsen, Medical Reference Librarian, John Crerar Library, Chicago. Philadelphia: J. B. Lippencott Company, 1946.

The literature since the first description of infantile paralysis has been surveyed and tabulated. Over 500 pages of the book are given up to a chronological listing of the articles that have been published, with many of them containing a short abstract of the article. The first was in 1789, the next in 1810. There were single articles in 1823, 1828, 1829, 1831 and 1833. By the time the first century had passed there were 433 articles listed, besides several cases where two to five were listed under the same number. Wherever there was any special reason of interest, a short abstract is given. Of late years the papers are numerous, the total listing being 8,320. There is a listing by authors and one by title, but no listing according to publications. We have, however, in a few minutes' search, found three references to the JOURNAL

(Continued on Page 1126)



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(Continued from Page 1124)

MSMS. This book is an indispensable addition to any reference library and to the man making more than an ordinary study of this disease.

* * *

PNEUMOPERITONEUM TREATMENT. By Andrew Ladislaus Banyai, M.D., F.A.C.P., F.C.C.P.; Associate Clinical Professor of Medicine, Marquette University Medical School, Milwaukee; Member Editorial Board, *Diseases of the Chest;* Formerly Preceptor in Tuberculosis, School of Medicine, University of Wisconsin. With seventy-four illustrations. St. Louis: C. V. Mosby Company, 1946. Price $6.50.

A historical sketch shows the first use of pneumoperitoneum in 1872, during an operation for ovarian tumor, when tuberculous peritonitis was found and the patient made a complete recovery. A chapter is devoted to the details of the operation. Tuberculous enterocolitis gets a chapter. Pulmonary tuberculosis is considered in about a hundred and thirty pages. Cases are given and many details of treatment. Other uses of pneumoperitoneum are given, including bronchiectasis, pulmonary emphysema, and pulmonary hemorrhage. This book is well written, well illustrated and a valuable guide to those using this method of treatment, which incidentally is reputed to give good results.

* * *

NARCOTICS AND DRUG ADDICTION. Erich Hesse, M.D. New York: Philosophical Library, 1946. Price $3.75.

This is a study of the narcotic and stimulating drugs in use throughout the world for pleasure or habit. There is an historical reference to the opium wars, and the attempts to control opiates. The effects and chemical formula of opium are given, as well as studies of the effects of coca leaves and cocaine, their production and consumption. In Mexico there is a small cactus, mescaline, with narcotic properties and vicious effects. Hashish, or Indian Hemp, toad stools, and intoxicating pepper (kava-kava) are also interesting narcotics, extensively used in certain parts. The alcohols, tobacco and purine drugs are studied for their use as well as abuse. Betel chewing is mentioned. This is a book of scientific attainments, but written popularly for more or less general reading. It is full of interest.

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THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS. By John Albert Key, B.S., M.D., St. Louis, Mo., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine; Associate Surgeon, Barnes, Children's, and Jewish Hospitals; and H. Earle Conwell, M.D., F.A.C.S., Birmingham, Ala., Orthopedic Surgeon to the Tennessee Coal, Iron and Railroad Company and the American Cast Iron Pipe Company; Chairman of the Committee on Fractures and Traumatic Surgery of the American Academy of Orthopaedic Surgeons; member of the Fracture Committee of the American College of Surgeons; Associate Surgical Director of the Crippled Children's Hospital; Attending Orthopedic Surgeon to St. Vincent's, South Highlands, Jefferson-Hillman, Children's and Baptist Hospitals, Birmingham, Alabama. Fourth Edition. St. Louis: C. V. Mosby Co., 1946. Price $12.50.

The fourth edition of this text book contains an excellent description of many newly accepted methods now in use in the treatment of fractures. The indications and the technical procedures are adequately and thoroughly described. The obsolete and older method

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have either been completely deleted or are merely mentioned, thus necessitating no unnecessary reading matter.

As would be expected, many lessons from the past war have been incorporated in this text and the advances in war surgery are discussed, although a more detailed description of some procedures might have been given.

The authors, as in the past, have prefaced each section with a thorough discussion of the surgical anatomy of the part to be discussed and this is most important for a thorough understanding of the management of fractures and the complications incident to them.

This edition contains an excellent discourse on injuries in the region of the hip. The treatment of hip fractures has changed rapidly in the past ten years due to the introduction of new methods of handling and to the use of new instruments and devices. The authors have described these methods adequately and have given clearly the indications for the use of each.

This is a most comprehensive textbook on the management of fractures and sprains; it is exceptionally well illustrated, showing both pre-reduction and post-reduction films of all types of fractures; it is very well written, and it contains a comprehensive and usable index.

This is a very excellent reference book and should be in the library of all who are dealing with traumatic injuries.—P.C.K.

* * *

MODERN MANAGEMENT IN CLINICAL MEDICINE. By F. Kenneth Albrecht, M.D., S.A., Surgeon, U. S. Public Health Service; Kansas State Tuberculosis Consultant; formerly Clinical Director U. S. Marine Hospital, Baltimore, Md. Baltimore: The Williams & Wilkins Co., 1946. Price $10.00.

The author states that this volume is intended for the "doctor's office," and it is just that. It is an invaluable reference book and adapted to the everyday work that comes into an office. The chapter on history taking should be read by every doctor; the importance of taking a careful history is stressed; and the outlines given, if followed, would establish a sound foundation in the approach to correct diagnosis of a case.

Symptoms are concisely discussed and tabulated so as to emphasize the important diagnostic points. Differential diagnosis is often outlined in excellent tables. Treatment is brief but covers adequately all accepted therapy and details all modern advances in drugs. There is an excellent and usable chapter on diets. This is one of the most practicable books on clinical medicine that I have read.—M.J.C.

* * *

CORNELL CONFERENCES ON THERAPY. Volume I. Edited by Harry Gould, M.D., Managing Editor, David P. Barr, M.D., Eugene F. DuBois, M.D., McKeen Cattell, M.D., Charles H. Wheeler, M.D. New York: The MacMillan Company, 1946. Price, $3.25.

The two departments of Medicine and Pharmacology of the Cornell University inaugurated in 1937 a series of conferences on therapy in order to develop an interest in rational therapeutics. A group of drugs, a therapeutic procedure, a symptom or a disease is selected as the

(Continued on Page 1130)

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topic for a discussion. Some conferences used the round-table method of discussion. It is now planned to publish a yearly volume representing the quality and lasting value of these discussions. The first conference represents the doctor's bag and what it contains, also what an ideal bag should contain. Fifteen conferences are given in this first volume. It is not necessary to list them but merely to state that the information available in this little book is amazingly practical.

* * *

PRE-OPERATIVE AND POSTOPERATIVE TREATMENT. Edited by Lt. Col. Robert L. Mason, M.C., A.U.S., Cusbing General Hospital, Farmingham, Massachusetts; and Harold A. Zintel, M.D., Harrison Department of Surgical Research, University of Pennsylvania School of Medicine; Assistant Surgeon, Hospital of the University of Pennsylvania. Second Editon. 584 pages, with 157 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price, $7.00.

This second edition coming nine years after the first has so much of advancement in pre-operative treatment, as well as postoperative advancement that the book is nearly rewritten. "Successful surgical treatment has come to mean not only the removal of diseased structures, but also the restoration of normal function." With that in mind emphasis is given to the careful and complete diagnosis, accurate histories, and an understanding of the surgical pathology. Anesthesia and its administration is described and illustrated, with the correct and incorrect things described. Water balance is important, transfusion, postoperative pneumonia, shock complications of the urinary tract. This book does not attempt to give the surgical procedures, but does give the minutia for preparing the patient and the personnel in charge. There are 584 pages of most interesting material needful for the correct and best care of the surgical patient. We are much pleased with a beautifully executed text.

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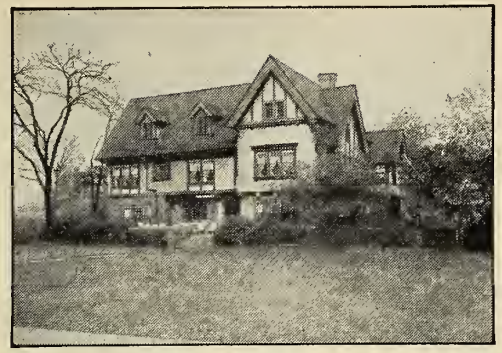
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Whereas, David M. Kane, M.D., of Sturgis, Michigan, departed this life on June 15, 1946, following a life's service of many years of skill, efficiency and devotion to a large clientele who will mourn his loss, we extend our sympathy to them in their bereavement.

And whereas, we are aware that the unselfish devotion to his duties for the past few years may have hastened his death, we take pride in the glory of his achievement.

Now whereas, be it resolved, that the St. Joseph County Medical Society, deeply regrets his passing, appreciates his interest and services for the advancement of the profession and the Society of which he was president at his death, expresses gratitude for an example of unselfish devotion, and mourns the loss of a friend and counselor.

And further, that this resolution be spread upon the Journal of the State Medical Society and that copies of same be sent to his nearest relatives.

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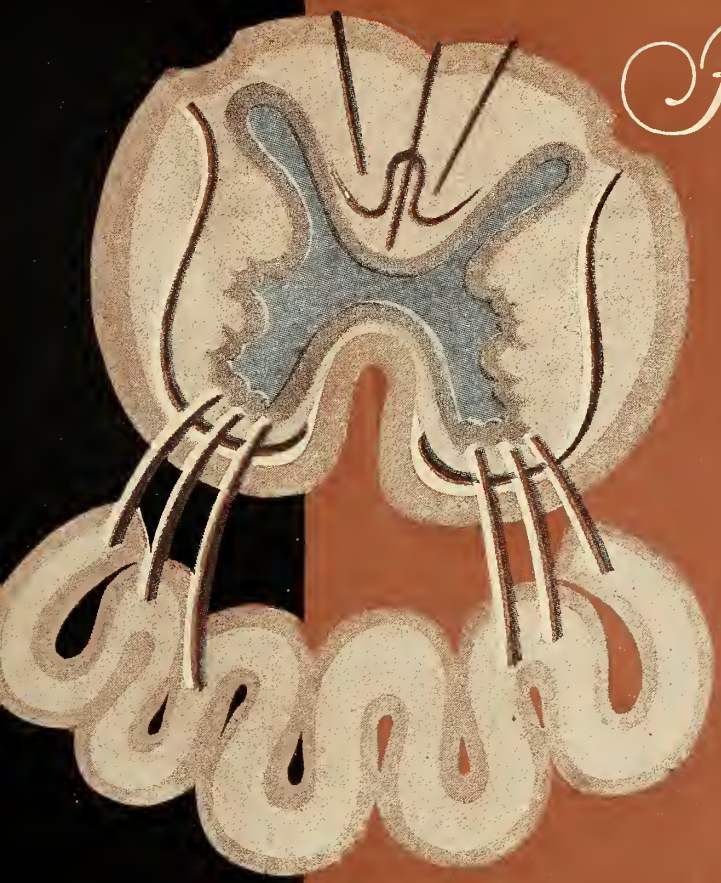
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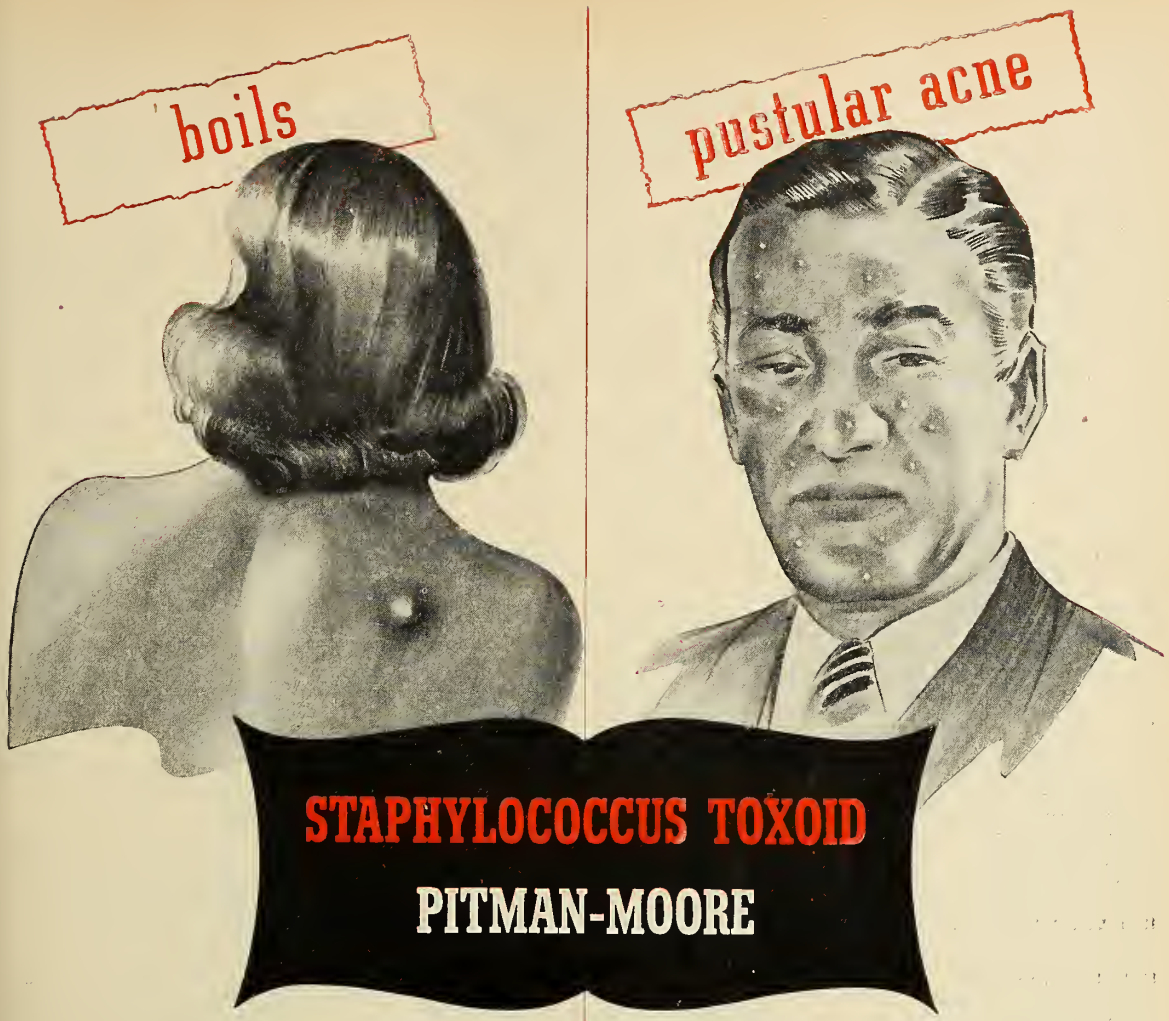
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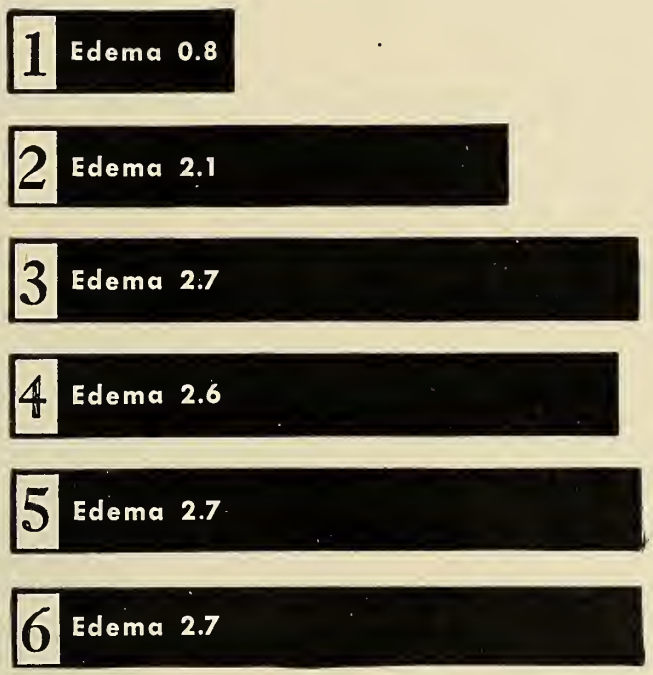
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SOCIAL SECURITY ACT AMENDED

The Congress, on August 2, 1946 as one of its last acts before adjournment, amended Title V of the Social Security Act increasing the total annual authorization for maternal and child health services from $5,820,000 to $11,000,000, and for crippled children's services from $3,870,000 to $7,500,000.

The proposed amendments were recommended by the Senate Committee on Education and Labor in lieu of the proposals in the Pepper Maternal Health Bill (S. 1318).

A conference of maternal and child health service and crippled children directors was held in Washington, under the auspices of the U. S. Children's Bureau, September 18-19. Discussed were the "most urgent problems for improving the health of mothers and children, such as the special need for developing new and extending current medical care programs for children with rheumatic fever, cerebral palsy, hearing defects, and other crippling conditions, for the development of demonstration school health service projects in selected areas; increasing and improving facilities for the care of prematurely born infants and purchasing care for such infants from acceptable hospitals; the development in selected areas of medical and dental care programs for mothers and children, and for the promotion of mental hygiene programs for children." Also considered was ways and means whereby the state agencies can directly assist teaching institutions that wish to increase their staff and facilities for the graduate training of professional workers in these specialized fields. The possibility of state agencies making grants of these funds to teaching institutions for service and training programs was thoroughly explored.

The Children's Bureau (exclusive of its industrial division) was transferred to the Federal Security Agency under President Truman's Reorganization Plan No. 2, effective July 16, 1946. The Bureau now operates under the Commissioner of Social Security of the Federal Security Agency.

CRIPPLED CHILDREN'S AFFAIRS

The Crippled Children's Commission has accepted in principle the Uniform Minimum Fee Schedule for government agencies. It is limited in this action by provision of the law governing it fixing a maximum as $75.00 for any one case. With this limitation fees are being readjusted to conform as near as practicable with the Uniform Schedule. There is also another limitation. The form for making out charges makes provision for a listing of service and a place for the "charge." There is the following in fine print: "The amount charged for above goods or services is no higher than that charged to any other state or local public agency for similar goods or services, nor in the case of medical care rendered does it exceed the rate listed in the prevailing Michigan Uniform Fee Schedule for Government Agencies."

There is the expressed policy, and the key word is "charged." There are counties in the state that have understandings with agencies fixing a very minimum payment for medical services. If the doctor wishes to have his charges paid he must make a "charge" that is equal to the Uniform Fee Schedule. He may be compelled to accept less at times, but he will have made the "charge." This distinction is taken from the revised manual of the Michigan Department of Social Welfare, dated July 25, 1946.

Many agencies of the state have taken upon themselves the limitation of $75.00 as a top fee which is in the Crippled and Afflicted law, but not in the others. This limitation should be removed, or upped at the next legislative session.

NATIONAL ARTHRITIS RESEARCH FOUNDATION

Mr. Spyros P. Skouras, President of the 20th Century Fox Film Corporation, has accepted the chairmanship of a dinner to be held at the Waldorf Astoria Hotel on October 7, 1946, to launch a campaign for the Foundation. A goal of $2,500,000 has been set for construction and equipment of the research laboratories, to be located at Hot Springs, Arkansas.

Dr. Thomas Parran, Surgeon General, said in the National Health Survey of 1938, more people reported they were suffering from rheumatism than from tuberculosis, cancer, diabetes, and heart disease combined. The medical care alone exceeds $100,000,000 with about 7,000,000 Americans sufferers.

NEW QUARTERLY MEDICAL JOURNAL

The Quarterly Review of Dermatology and Syphilology has just been announced. It will survey all published material on Dermatology and Syphilology beginning with January, 1946. Donald M. Pillsbury, M.D., is editor-in-chief, assisted by Herman Beerman, M.D., and Clarence S. Livingood, M.D.

STIPENDS FOR PUBLIC HEALTH TRAINING

The Michigan Department of Health has federal funds available for training of physicians, nurses, sanitary engineers and sanitarians in public health. Previous policies of the U. S. Public Health Service have been redefined so that trainees will have sufficient funds for reasonable subsistence, while obtaining academic training. The amounts of these stipends approximate the salaries which they will get after completing their training.

Public health in Michigan is administered only by physicians. This phase of public service has become an integral part of community life and offers a very

(Continued on Page 1148)

Protein as a Therapeutic Factor In Infectious Disease

In the recent past, increasing attention has been called to the influence of severe infections upon protein metabolism and the profound destruction of tissue and serum protein which occurs in these states.[1, 2]

In many instances, prompt control of infection by sulfonamides or penicillin is not followed by the desired degree of systemic improvement. Instead, protracted, stormy convalescence supervenes. A factor which is often responsible for delayed recovery is known to be the intense protein depletion which not only accompanies but also follows in the wake of infectious disease. Not infrequently, recovery can be sharply hastened by correction of existing nutritional deficiencies, foremost among them, protein deficiency. A protein intake, adequate both qualitatively and quantitatively, thus gains increasing significance as an integral part of therapy whenever the condition under treatment is known to lead to increased nitrogen excretion.

Among the protein foods of man meat ranks high, not only because it is rich in complete, biologically adequate protein, but also because its palatability and the many attractive ways it can be prepared make it acceptable to most patients.

---

[1] Tillett, W. S., Cambier, M. J., and McCormack, J. E.: The Treatment of Lobar Pneumonia and Pneumococcal Empyema with Penicillin, Bull. New York Acad. Med. *20*:142, March, 1944.

[2] Armstrong, S. H., Jr.; England, A. C., Jr.; Favour, C. B., and Scheinberg, I. H.: Anemia and Hypoproteinemia Complicating Severe Protracted Pneumonia: Treatment with Penicillin—Role of Specific Supportive Therapy in Recovery, J.A.M.A. *127*:303 (Feb. 10) 1945.

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(Continued from Page 1146)

interesting specialty in the field of medicine. Those who are interested in the specialty of public health and would like to receive the required training in this field should address communications to William DeKleine, M.D., Commissioner, Michigan Department of Health, Lansing 4, Michigan.

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Lead Poisoning.....All Day
Surgical Conference—The Foot
in Industry.....Afternoon
Professional Relations Conference
and Dinner.....Evening

Tuesday, October 1

Opening General Session.....Morning
Topic—Human Relations in Industry
Elective Seminars .....Afternoon
Section A—Industrial Physiology
Section B—Administrative Methods
Section C—Workmen's Compensation
Dinner and Conference on Pan-
American Industrial Health.....Evening

Wednesday, October 2

General Session.....Morning
Atomic Energy—Its Effects
in Industry and Medicine
General Session.....Afternoon
A Positive Health Program for Industry
Dinner and Conference on Health
and Welfare Programs in Industry.....Evening

(NOTE: All requests for hotel rooms should be made through the Copley-Plaza Hotel.)

SCIENTIFIC SESSION, GENERAL PRACTICE OF MEDICINE, REPORT

The Section of the General Practice of Medicine, as such, held their first scientific sessions at the A.M.A. meeting in San Francisco in July, 1946. Nine hundred and thirty-seven physicians registered in the section making it the third largest of the meeting. Three morning sessions were held, the third being a joint meeting with the Section on Obstetrics and Gynecology and there was a constant attendance of between two and three hundred men. The subject of the papers covered the range of general medicine and surgery and obstetrics and gynecology and from the general comments heard at the meeting, the papers were favorably received. Dr. Paul Davis of Akron, Ohio, was elected section chairman, Dr. E. S. Royston of Los Angeles, Calif., Vice Chairman, Dr. W. B. Harm, Detroit, Mich., Secretary, Dr. Howard E. Griffin, Graham, Texas, Delegate, Dr. Tom Robinson, Salt Lake City, Utah, Alternate. The Executive Committee is Dr. William Bowman, Upper Sandusky, Ohio, Dr. Wingate Johnson, Winston-Salem, N. C. and Dr. Paul Davis, Akron, Ohio.

A resolution was introduced into the House of Delegates of the A.M.A. asking that the delegates voice their approval of the establishment of general practice sections in state and county societies and on the active visiting staffs of approved hospitals. An amendment by Dr. Vest of West Virginia deleted that portion pertaining to hospitals and then the resolution was passed as amended.

An informal meeting of men in general practice was held following two of the section meetings and the decision was made to form a National Academy or Board of General Practitioners with the present section officers as its officials, and special committees were appointed to draw up a constitution and by-laws and to start a membership drive on a state basis, the purpose being for the betterment, both professionally and economically, of general practitioners. Further information as to the progress of this organization may be gained from Dr. Paul Davis, Akron, Ohio, the chairman.

The next scientific sessions of the section will be held at the A.M.A. meeting in Atlantic City in June, 1947. Make your reservations early.

W. B. Harm, M.D.
Chairman, General Practice Section, MSMS

ARE POLIO AND TONSILS LINKED?

Editor's Note: This article appeared in the *Detroit Free Press* Sunday, August 11, 1946, about a week after the Editorials on pages 1228 and 1230 were written. We are pleased to add this information.

OPERATION APPEARS TO INCREASE PERILS FOR LIFE

SCIENCE SET TO PROBE POLIO-TONSIL LINK

By Robert Sturgiss
Free Press Staff Writer

A simple tonsil operation carries the threat of death from poliomyelitis this month and next.

That's the warning of Dr. Bruce H. Douglas, Detroit health commissioner.

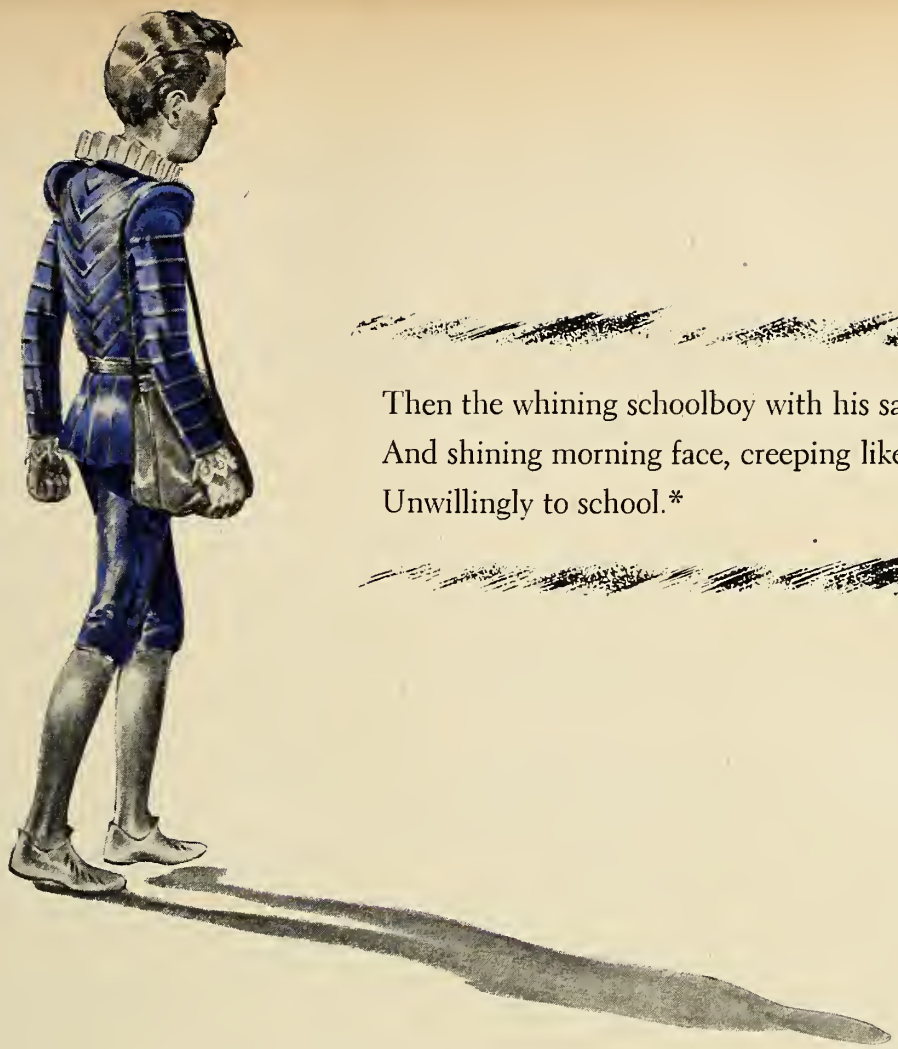
His records disclose that the dread disease strikes in its severest form during "polio season" among persons whose tonsils had been removed 30 to 60 days earlier.

However, there is little evidence that it strikes more frequently among those who have undergone the operation.

But case histories compiled since 1939 by Dr. Franklin Top, medical director of Herman Kiefer Hospital, disclose its effects are far more deadly among this group.

Even more startling, and possibly pointing a finger

(Continued on Page 1150)



Then the whining schoolboy with his satchel,
And shining morning face, creeping like snail
Unwillingly to school.*

ZYMENOL easily overcomes constipation and irregular bowel habits induced by youthful procrastination. This brewers' yeast in emulsion** aids restoration of physiological bowel content through zymolysis and tends to normalize intestinal motility with its natural vitamin B complex content. Soft, comfortable evacuation is assured without habit-forming catharsis or colloidal bulkage. Because ZymenoL is agreeably palatable, sugar-free, and the only emulsion effective in teaspoon dosage, your youthful patients are seldom control problems. For acceptable bowel management in *this* age group, specify ZymenoL.

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*Second of a series depicting the Seven Ages of Man. From Shakespeare's "As You Like It."

ARE POLIO AND TONSILS LINKED?

(Continued from Page 1148)

toward the mysterious infiltration of the polio virus into the human system, are other statistics compiled by Dr. Top.

They show that polio strikes more frequently, in its worst forms, and claims a far heavier death toll among persons who have undergone tonsillectomies at any time.

Medical men confess they cannot produce evidence to show why this should be true.

Some suggest that the tonsils, long believed to be of no service to civilized man, actually are watch dogs to protect the throat against disease.

The experts point to such figures as these as significant:

In 1944, 224 of the 343 who contracted polio in Wayne County had undergone tonsillectomies at one time or another.

Of the 16 who died that year, all but three had had tonsils removed. Of the 47 who fell ill of deadly bulbar polio, almost 90 per cent had case histories of earlier tonsillectomies.

Of the 48 who contracted equally deadly spino-bulbar polio, almost 92 per cent had undergone tonsillectomies.

Dr. Top offers no explanation, nor does he claim his records of case histories are concrete evidence of a link between tonsil removal and poliomyelitis.

Tonsils still must be removed when they are infected, he stresses.

But he and Dr. Douglas do maintain the case-history records compiled in Detroit for eight years do point a new path for medical research to follow.

In cases where polio is contracted within 30 to 60 days after a tonsillectomy in July, August and September, there is a possible explanation.

Here the killing virus has easy access to damaged mucous membranes of the throat following the operation.

And in such cases the patient usually contracts bulbar or sino-bulbar polio, the deadliest forms.

REHABILITATION AND POSTGRADUATE MEDICAL EDUCATION

Master's Degrees in Medical Specialties

Master's degrees were awarded by Wayne University to four candidates in the general field of clinical specialties and to three candidates in the field of basic sciences during the year ending in June, 1946, according to a recent report of Professor Arthur H. Smith, member of the University Graduate Council and chairman of the Committee on Graduate Studies in Medical Education at the University.

The recipients in the clinical fields and their areas of work are: Louise Ange, M.D. (M.S. in Obstetrics and Gynecology) "The RH Factor—A Study of Its Clinical Application and Significance at Woman's Hospital in 1944"; Eugenia Gurskis, M.D. (M.S. in Obstetrics and Gynecology) "Criteria for the Diagnosis of Early Carcinoma of the Cervix Uteri"; Robert T. Crowley, M.D. (M.S. in Surgery) "Organizing Hemothorax —A Clinical Entity"; and Lee Carrick, M.D. (M.S. in Dermatology and Syphilology) "Epidemiology of Tineacapitis in Detroit School Children. Local Treatment of Tineacapitis due to Microsporon andonini."

The recipients in the basic sciences and titles of their theses are: Elizabeth Glassco, "Studies on the Palliative Action of Extract of Liver in Experimental Burn Shock"; Thomas Batchelor, "The Effect of Experimental Hepatic Dysfunction and of Alloxan Diabetes Upon the Serum Phosphatase Activity in the Dog"; and Paul C. Trucksis, "The Synthesis and Metabolism of certain N-substituted Barbituric Acids."

* * *

Postgraduate Enrollment

Increased enrollment and expanded curricula in graduate medical studies at Wayne University were trends noted by Professor Arthur H. Smith, member of the University Graduate Council and chairman of the Committee on Graduate Studies in Medical Education at the University, in a recent summary report.

In the field of clinical specialties the registrants for the master's degree rose from forty-eight for the quarter ending in March, 1946, to seventy-eight for the quarter ending in June, 1946.

In the basic sciences, the registrants for graduate degrees rose from six in the quarter ending December, 1945, to ten for the quarter ending June, 1946.

In the postgraduate continuation curriculum the registration grew from fifty-three for the quarter ending in December, 1945, to 267 for the quarter ending in June, 1946. Twenty-two additional persons were taking unit refresher courses in proctology, ophthalmology, and dermatology during this final quarter.

The general enrollment increase was partially a reflection of the demand for graduate work by returning veterans. Dr. Smith, who is also Veterans Counselor at the College of Medicine, pointed to a definite trend toward surgery among the younger men who are returning from military service and seeking residencies in the hospitals.

During the year's period, two programs, pathology and radiology, were established on a sound basis, Dr. Smith pointed out. In addition, the department of orthopedics is in the process of formulating a graduate program, he said.

The ten hospitals of the Metropolitan area which co-operated in the graduate teaching program were: Detroit Receiving, Alexander Blain, Grace, Harper, Wayne County General, Providence, Children's Hospital, Herman Kiefer, St. Mary's and Woman's Hospital.

The program for the coming year in the various phases of the University's graduate-level work are now being prepared and will be announced in the near future.

Little Joe Genius Says—

This Dr. Franz Goldman may be an authority on Public Health at Yale, but when he states that Michigan Medical Service shows a waste of the subscriber's premiums when it shows an administrative expense of 11 to 12 per cent we don't think any of our modern insurance companies would fight to obtain his services.

steroid therapy in arthritis

CLINICALLY DISTINCTIVE

In the subjective and objective response of the arthritic patient to Ertron therapy, the clinician can observe the practical effects of an interesting and vital phenomenon of steroid chemistry.

The findings of various investigators indicate that beneficial effects of Ertron are due to its systemic action. The Ertronized patient first notices a distinct feeling of well-being. This is followed in a large proportion of patients by a recession of pain, diminution of soft-tissue swelling, increased mobility of the affected joints, improvement of function and resistance to fatigue. The arthritic is enabled to increase his daily activities or to better withstand the surgical procedures of orthopedic restoration.

CHEMICALLY DIFFERENT

Laboratory studies over a five year period prove that Ertron—Steroid Complex, Whittier—contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure form establish the chemical uniqueness of Ertron and its steroid complex characteristics. Each capsule of Ertron contains 5 milligrams of activation-products. Biologically standardized to an antirachitic activity of fifty thousand U.S.P. Units.

Physician control of the arthritic patient is essential for optimum results. Ertron is available only upon the prescription of a physician.

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Contributions and Pledges to Michigan Foundation for Medical and Health Education

From September 18, 1945 to August 18, 1946

Allegan County Medical Society	$ 85.
Anonymous (Memory of Mother)	$ 1,000.
Regis F. Asselin, M.D., Detroit	5.
R. H. Baribeau, M.D., Battle Creek	50.
Barry County Medical Society	50.
M. G. Becker, M.D., Edmore	1,000.
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85.
C. D. Brooks, M.D., Detroit	1,000.
J. D. Bruce, M.D., Ann Arbor	1,000.
A. S. Brunk, M.D., Detroit	1,000.
E. I. Carr, M.D., Lansing	1,000.
L. G. Christian, M.D., Lansing	100.
Clinton County Medical Society	50.
C. V. Costello, M.D., Holland	1,000.
H. H. Cummings, M.D., Ann Arbor	1,000.
A. C. Curtis, M.D., Ann Arbor	15.
J. S. DeTar, M.D.	1,000.
Dickinson-Iron County Medical Society	80.
Eaton County Medical Society	70.
A. C. Furstenberg, M.D., Ann Arbor	1,000.
L. J. Gariepy, M.D., Detroit	1,000.
Genesee County Medical Society	1,000.
Robt. W. Gillman, M.D., Detroit	1,000.
Gratiot-Isabella-Clare County Medical Society	125.
Grand Traverse-Leelanau-Benzie County Medical Society	167.50
T. J. Heldt, M.D., Detroit	25.
Lee Hileman, M.D., Ecorse	10.
Hillsdale County Medical Society	95.
L. J. Hirschman, M.D., Detroit	1,000.
L. E. Holly, M.D., Muskegon	1,000.
Houghton-Baraga-Keweenaw County Medical Society	140.
R. J. Hubbell, M.D., Kalamazoo	1,000.
Huron County Medical Society	55.
Wm. A. Hyland, M.D., Grand Rapids	1,000.
Ingham County Medical Society	1,572.50
S. W. Insley, M.D., Detroit	1,000.
Jackson County Medical Society	350.
Joint Committee on Health Education	1,000.
Francis Jones, M.D., Lansing	1,000.
F. H. Lashmet, M.D., Petoskey	100.
Lenawee County Medical Society	125.
S. R. Light, M.D., Kalamazoo	100.
Macomb County Medical Society	130.
Manistee County Medical Society	100.
Marquette-Alger County Medical Society	135.
F. F. McMillan, M.D., Charlevoix	100.
Mason County Medical Society	35.
Mecosta-Osceola-Lake County Medical Society	45.
H. A. Meinke, M.D., Hazel Park	50.
Menominee County Medical Society	55.
Michigan Medical Service	10,000.
Mrs. K. B. Miner, Flint	1,000.
Monroe County Medical Society	145.
H. L. Morris, M.D., Detroit	1,000.
Muskegon County Medical Society	310.
R. L. Mustard, M.D., Battle Creek	1,000.
Cora Boyce Neal, Grand Rapids	1,000.
Ontonagon County Medical Society	15.
Wm. H. Parks, M.D., Petoskey	100.
A. W. Petersohn, M.D., Battle Creek	25.
L. B. Rasmussen, M.D., Vicksburg	25.
Lawrence Reynolds, M.D., Detroit	1,000.
J. M. Robb, M. D., Detroit	1,000.
John Rodger, M.D., Bellaire	100.
G. B. Saltonstall, M.D., Charlevoix	1,000.
Sanilac County Medical Society	50.
C. A. Scheurer, M.D., Pigeon	20.
E. F. Sladek, M.D., Traverse City	5,000.
Ferris N. Smith, M.D., Grand Rapids	1,000.
St. Clair County Medical Society	220.
Shiawassee County Medical Society	1,000.
H. B. Steinbach, M.D., Detroit	100.
R. H. Stevens, M.D., Detroit	1,000.
C. L. Straith, M.D., Detroit	1,000.
R. H. Strange, M.D., Mt. Pleasant	1,000.
Jerrian VanDellen, M.D., East Jordan	100.
Ralph Wadley, M.D., Lansing	1,000.
R. V. Walker, M.D., Detroit	1,000.
Washtenaw County Medical Society	200.
H. L. Weitz, M.D., Traverse City	100.
C. G. Wencke, M.D., Battle Creek	10.
John O. Wetzel, M.D., Lansing	1,000.
E. L. Whitney, M.D., Detroit	25.
E. R. Witwer, M.D., Detroit	1,000.
Margaret H. Zalen, M.D., Kalamazoo	5.

(Balance Sheet and Pledge Card on Page 1156)



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CELLULITIS

No. 3 IN SCHENLEY LABORATORIES' CONTINUING SUMMARY OF PENICILLIN THERAPY

Cellulitis caused by penicillin-sensitive organisms readily responds to penicillin therapy. By the early administration of penicillin in adequate doses, suppuration may be prevented and prompt resolution of the inflammatory process obtained. When abscess formation has occurred, penicillin will localize and control the infection but surgical evacuation of the purulent material may be required to effect a cure.

The administration of penicillin combined, when indicated, with surgical, supportive, and other measures, will in most instances rapidly control and eradicate the infection. Thus, the duration of the disease is shortened, and the possibility of complications reduced to a minimum.

A daily total of 160,000 to 480,000 units, depending upon the severity of the infection, in divided doses every 2 to 3 hours by the intramuscular route will usually be adequate to effect a cure. Duration of the course will depend upon response to therapy. If thought desirable, as a supplement to parenteral administration, penicillin may be employed by local injection or instillation of solutions containing 5,000 to 50,000 units per cc.

WOLLGAST, C. F.: *The Clinical Use of Penicillin: A Report of 115 Cases Treated in an Army Hospital, Texas State J. M. 40:225 (Aug.) 1944.* FARQUHARSON R. F.; GREEY, P., & TOWNSEND, S. R.: *Results of Penicillin Therapy: A Report for the Joint Services Penicillin Committee, Canad. M. A. J. 53:1 (July) 1945.*

BEFORE YOU DECIDE ON THE PENICILLIN OF YOUR CHOICE

For many years, Schenley has been among the world's largest users of research on mycology and fermentation processes. In addition, Schenley Laboratories manufactures a complete line of superior penicillin products —products thoroughly tested for potency and quality. These two important facts mean you may give your patients the full benefits of complete penicillin therapy.

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MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

BALANCE SHEET
as of July 23, 1946

ASSETS		
1. Cash:		
(a) Contributions to Michigan Foundation for Medical and Health Education (since Sept. 18, 1945)	$ 40,588.81	
(b) Cash transferred from MSMS Foundation for Postgraduate Medical Education	2,142.44	
(c) Interest on Canadian bonds to June 1, 1946	407.10	
(d) Proceeds of sale of called Bond (June 18, 1946)	1,010.64	
	44,148.99	
Less legal and misc. expenses to date, and purchase of bonds and stocks	39,890.21	
Cash on hand (Mich. National Bank, Lansing)		$ 4,258.78
2. Bonds and Stocks:		
(a) Dominion of Canada 3s due June 1, 1960, at cost	29,003.50	
(b) Continental Illinois National Bank (50 shares) at cost	5,250.00	
(c) Boston Edison (100 shares) at cost	5,200.44	
(d) Bonds transferred from MSMS Foundation for Postgraduate Medical Education: United Light and Power ($1,000 due April 1, 1959); U. S. Treasury Bonds ($5,000 due March 15, 1952) at cost	6,054.03	
(e) Bond contributed by Shiawassee Co. Med. Soc.	1,000.00	
Total of Stocks and Bonds		46,507.97
3. Series G Bonds in MSMS Foundation for Postgraduate Medical Education (hold in trust until maturity for the Michigan Foundation for Medical and Health Education)		14,500.00
4. Balance due on pledges		10,800.00
5. Life Insurance Pledged: E. F. Sladek, M.D., $5,000; J. S. De Tar, M.D., $1,000; R. S. Strange, M.D., $1,000		7,000.00
6. Estimate of value of one-half of Grace P. Biddle Estate		28,953.46
TOTAL		$112,020.21
LIABILITIES		
Bills Payable		24.00
BALANCE		$111,996.21

Name .....

Office Add..... City.....

Res. Add. ..... City.....

I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION
2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning September 19, 1945, the sum of

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$	$	$

My contribution is

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or **(2) In War or Victory Bonds** ☐ to be paid in the total sum ☐ or in annual payments of $.....

or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

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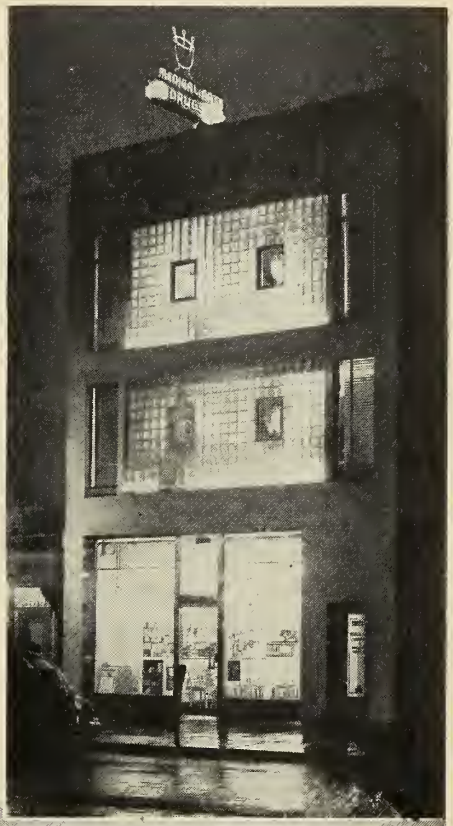
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Medical Arts Pharmacy represents the achievement, through the physician's co-operation, of one of the finest and most modern of professional prescription pharmacies in Michigan. Established in 1936 it has had a phenomenal growth through strict adherence to the highest of ethics. *"Nothing Sold Without a Doctor's Prescription"* has been the policy since the inception of Medical Arts Pharmacy and it continues to be rigidly maintained to this day.



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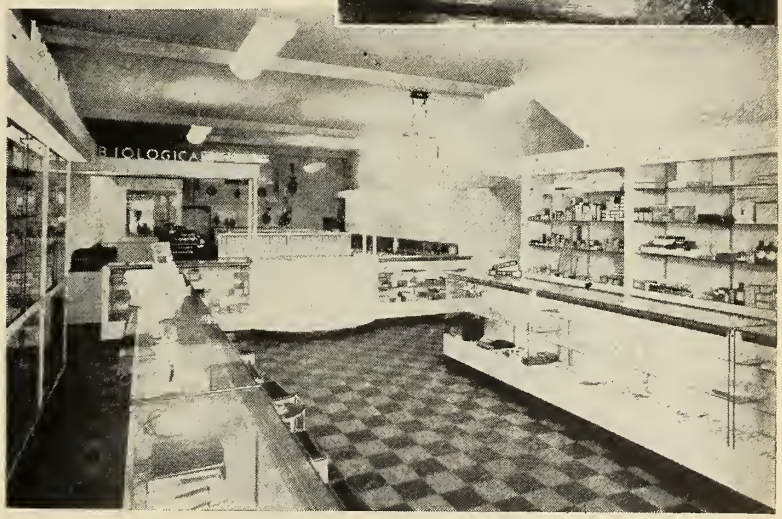
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Try Some of These on Your Patients

March of Health Quiz

How up to date are you in your knowledge of the advances made—and the problems still to be solved—in the field of health? A public health worker scored 76 on this test; a nurse, 82; and a physician, 95. But for the lay person, 68 is a good score. In any case, the smaller your score, the more health facts you will learn that you never knew before.

1. A person may be immunized successfully against all but which *one* of the following diseases?
smallpox chicken pox typhoid fever diphtheria

2. What disease currently causes more deaths during the first two years of life than do measles, diphtheria, infantile paralysis and scarlet fever combined, during the same period?
scurvy typhoid whooping cough influenza

3. Penicillin—the wonder drug—is the
(a) crowning achievement of the U. S. Public Health Service.
(b) discovery of Sir Alexander Fleming, a British scientist.
(c) by-product from the manufacture of aspirin.

4. Which *one* of the following is *not* transmissible from person to person?
cancer athlete's foot impetigo mumps

5. Malaria, yellow fever, smallpox and typhoid fever have which *one* of these in common?
(a) All are caused by the bite of an insect.
(b) All are always fatal.
(c) All are usually preventable.

6. Today's No. 1 killer of females in the 35-55 group is:
Nephritis cancer apoplexy accidents

7. An infant born today can be expected to live about how many years longer than the infant born 100 years ago?
7 17 27 37

8. Rickets, doctors say, is a disease caused by:
insufficient sleep
lack of Vitamin D
an unidentified microbe
heredity

9. In this country which *one* of the following causes more deaths *among children of school age?*
Rheumatic fever pleurisy appendicitis undulant fever

10. Scientific investigation has proved that the most frequent source of tuberculosis is
(a) contact with human carriers of the germ
(b) infected milk
(c) too little exercise

11. The United States Army today uses immunization procedures against at least seven diseases. Can you name six?

12. How many of the following famous names can you pair correctly with the medical achievement with which the name is associated?
1. Louis Pasteur 2. Bela Schick 3. Madame Curie 4. Wilhelm Roentgen
a. discovery of radium b. prevention of rabies c. discovery of the X-Ray d. development of test to determine immunity to diphtheria.

True or False?

13. Prolonged worry may contribute to or induce ulcers of the stomach.
14. The only natural source of vitamins is foodstuffs.
15. The germ that causes lockjaw is found only where there is rust.
16. Bone is the hardest substance in the body.
17. Every year an *increasing* number of persons in the United States become victims of diabetes.
18. Typhoid fever is spread through both contaminated milk and contaminated water.
19. A tooth kept clean will never decay.
20. Color blindness affects more females than males.
21. Infantile paralysis never afflicts adults.
22. Draft rejections for medical reasons in World War II were proportionately higher in rural areas in the United States than in cities.

* * *

For the answers, turn to page 1164. Allow 5 points for each correct answer to questions 1 to 10, inclusive; 3 points for each correct sub-answer to questions 11 and 12; and 2 points for each correct answer to questions 13 through 22.

By Dr. Charles Frederick McKivergan. Reprinted from *Better Homes & Gardens* magazine, May, 1946, and condensed in *The Reader's Digest,* July, 1946.



Alice had it easy

We've come to appreciate Alice's feelings in "Through the Looking Glass" when the Red Queen said,

"...it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!"

But we find ourselves in an even more trying predicament.

Production of AMINOIDS* is up more than 100% over last year and still we are not able to keep up with the demand.

We are improving and extending production facilities as rapidly as post-war conditions permit. Meanwhile we are trying to distribute our output as equitably as possible. We hope we shall soon be able to fill every order promptly. Your understanding of our predicament and your continued friendly cooperation will be appreciated.

*The word AMINOIDS is a registered trademark of The Arlington Chemical Company.

THE ARLINGTON CHEMICAL COMPANY

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Little Joe Genius Reports

Little Joe Genius had his ear to the ground.

"What do you hear Little Joe?", I asked.

"I hear a cacophony," he answered.

"A what?", I asked.

"A cacophony," replied Little Joe.



"Things are tough all over," I said taking a dim view of his vocabulary.

"A cacophony," said Little Joe, "is a bundle of sound that doesn't make sense."

"Like this conversation?" I asked.

"Well, something like it. The story is that everybody's talking and nobody seems to be doing anything. 'The world is full of sound and fury signifying nothing.'" Little Joe paused for breath.

"I recognize Shakespeare but I don't get the point," I interrupted.

"The point," said our junior Genius, "is that the folks who are doing things are too busy to talk."

"Fer instance."

"Well, take the doctors for instance. What are they saying?"

"I haven't heard them say much," I answered.

"That's true," said Little J. G. "They're so busy doing things they haven't time to talk."

"I made a study of health," he continued, "and I found out that the doctors are really going places."



"You're right," I agreed. "These new 'miracle drugs' are performing wonders."

"That's true," said Little Joe. "But that's just one side of the modern doctor's work. The other side is to protect the health of the largest number of people—and that's called the socio-economic side of medicine because it's a social problem tied in closely with both medical care and money."

"What are they doing about that?" I asked.

"I would have to talk for a long time to explain all of the things they're doing but here's a list my family doctor sent me when I asked him the same question—and I quote:

"1. Michigan doctors of medicine established Michigan Medical Service. This is an organization in which already one-seventh of Michigan's population is enrolled and which supplies financial protection against costs of serious illness and surgical treatment.

"2. Michigan doctors have spent over $60,000 of their own money in a radio program to educate the public on such dread diseases as diphtheria, cancer, tuberculosis, heart disease, diabetes, anemia, et cetera. They gave authoritative advice on such subjects as physical medicine, nutrition, maternal health, and healthful living in general.

"3. Michigan doctors of medicine established nine Rheumatic Fever Diagnostic Centers in Michigan to protect children from Rheumatic Fever through early treatment.

"4. Michigan doctors have worked enthusiastically in the establishment of Michigan's twelve Cancer Clinics, for diagnosis and treatment of Cancer, and six Cancer Detection Clinics for early diagnosis of the disease.

"5. A state-wide study of Child Health Care and services was made by the doctors at their own expense.

"6. The Michigan Foundation for Medical and Health Education has been established with Michigan doctors donating $112,000 for its work in supplying postgraduate study in these fields.

"7. M.D.'s started the Michigan Plan—a plan, currently being copied throughout the nation, which provides free care to veterans with service-connected disabilities by a doctor of the veteran's choice.

"8. Activity by fifty-one different committees of their medical organization, each working to promote better quality of medical care for more people, has taken thousand of hours of work.

"9. Michigan Hospital Service, currently supplying hospital care to one-fifth of the entire population of Michigan, has been actively supported and encouraged by doctors of medicine."

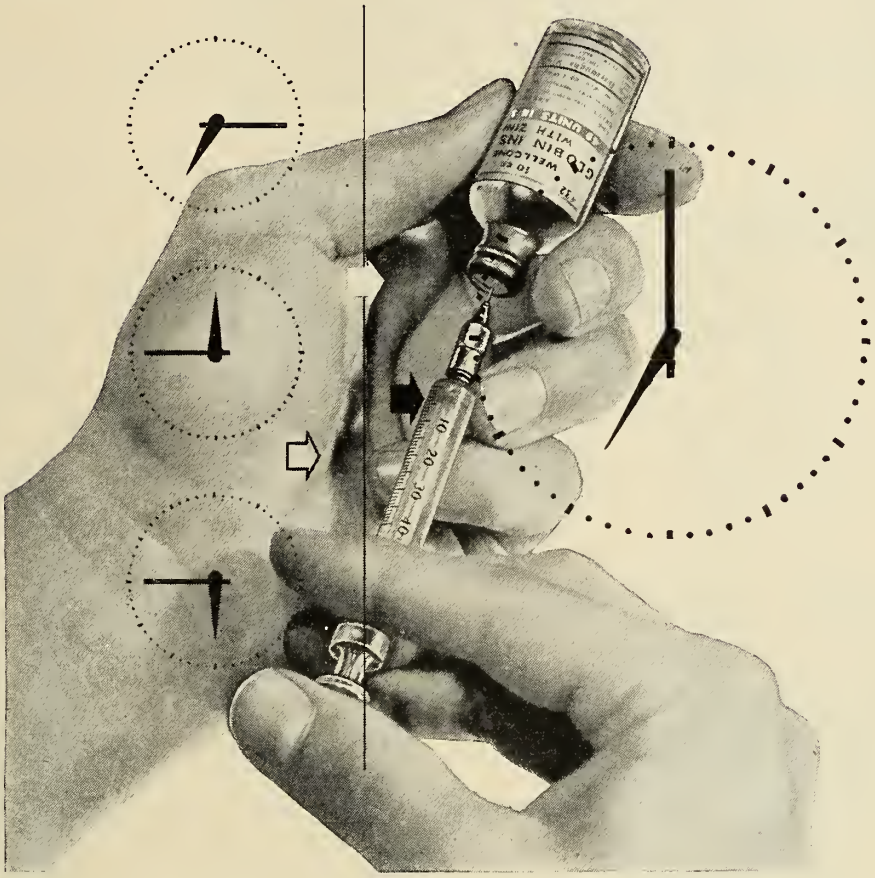


"Well," I said, "it looks as if the doctors of Michigan have been doing themselves proud."

"They're proud of that record and they've got bigger

(Continued on Page 1164)

How to shift to 'WELLCOME' GLOBIN INSULIN from 3 injections to 1 a day...



A relatively simple procedure can make the unique advantages of intermediate-acting 'Wellcome' Globin Insulin with Zinc available to patients on regular insulin (crystalline or amorphous). Three steps can change the patient from two or more injections daily to one injection a day.

STEP 1 The initial daily dose of 'Wellcome' Globin Insulin with Zinc should be approximately 2/3 the total number of units of regular insulin previously given daily.

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(Continued from Page 1162)

plans for the future," said Little Joe. "You see, here's the way my family doctor explained his profession to me. He said: 'The family doctor is still interested more than anything else in his patient, but he realizes that his group of patients can't isolate themselves from society and its health problems any more than a nation can isolate itself from the rest of the world. To be a good modern doctor I have to know how to spread quality medical care so that everybody who actually needs it can get it. I have to work at the problem of preventing disease by helping organize diagnostic clinics. I offer my services to the voluntary group medical insurance plans to put proper medical care within the financial reach of people with low incomes.' That may be one of the reasons why we're the healthiest large nation in the world," added Little Joe.

"I can see why it's a good idea to keep these doctors free of political control," I said. "The politicians aren't much interested in the future. That's why politics is so far behind the times in solving *governmental* problems, not to mention medical problems."

"What do you mean by that?" asked Little Joe Genius.

"Well, socialized medicine—in such proposals as the Wagner-Murray-Dingell Bill—has been getting a lot of publicity, and folks think if the government just takes over the medical profession they can get free medical service any time they need it."



"Oh, that," said Little J. Genius disgustedly, "only folks who dream too much think they can get something for nothing in this world. If socialized or governmental medicine should ever be foisted upon the people, as much for half as much medical care—after all, to the cost of medical care would be added the cost of political administration."

"Political medicine costs most and heals least," said I. "Folks have heard that a new tax starting at 3 per cent would be immediately put on their income and gosh knows we've got enough taxes now!"

"Too many," said Little Joe.

* * *

Write your Congressmen. They want your advice. If you want a doctor of your own choice to treat you; if you value your membership in Michigan Medical Service or other non-profit voluntary group medical insurance plans and want to keep them; if you don't want new taxes to finance a service you are already receiving; if you think the primary responsibility of a doctor should be to his patient and not to a federal bureau; if you don't want the government to run *your* business; then urge your U. S. Senators and Representatives to vote "NO" on legislation such as the Wagner-Murray-Dingell Bill or similar efforts to substitute "Political Medicine" for "American Medicine."

CHEST X-RAYS

Periodic chest x-rays of all employes of Veterans Administration hospitals and homes have been ordered in an effort to detect possible tuberculosis infections, Dr. Paul R. Hawley, chief medical director, announced September 18, 1946.

The action will make it possible to detect the disease in an effort to detect possible tuberculosis infections, serious and prolonged illness, to prevent dissemination of infection and to avoid excessive loss in working time and medical expense.

The program has been started as far as possible with existing personnel and facilities and without interfering with examination and treatment of veterans beneficiaries. Only VA salaried personnel and equipment will be used for the x-ray examinations.

New employes of hospitals and homes will be given chest x-rays at the time of their employment. Personnel now employed at hospitals and homes will be given chest x-rays as soon as possible and at least annually thereafter.

When VA employes end their service with hospitals or homes, they will be given chest x-ray examinations whenever possible.

ANSWERS TO "MARCH OF HEALTH QUIZ"

(Continued from Page 1160)

1. Chicken pox
2. Whooping cough
3. Discovery of Sir Alexander Fleming
4. Cancer
5. All are usually preventable
6. Cancer
7. Twenty-seven years
8. Lack of Vitamin D
9. Rheumatic fever
10. Contact with human carriers of the germ
11. Typhoid fever, smallpox, tetanus, typhus, yellow fever, cholera, plague. (In some areas immunization procedures have been used against diphtheria and certain types of pneumonia, and recently several million soldiers were immunized against influenza, so that any of these three diseases may be considered a correct answer also.)
12. 1—b; 2—d; 3—a; 4—c
13. True
14. False (What about Vitamin D from sunlight?)
15. False
16. False (The enamel of the teeth is)
17. True
18. True
19. False
20. False (Color blindness is ten times more prevalent in males.)
21. False
22. True



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ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

When the world's leading manufacturer of oatmeal, after long research, develops a cereal with all the proved, whole-grain benefits of oatmeal . . . yet especially processed for infant digestion . . . you just know it's worth consideration. BABY QUAKER Instant STRAINED OATMEAL is fortified with extra vitamins and minerals; thoroughly precooked; finely strained. Nothing for mother to do but add warm milk or formula —and how babies love it!

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Protein	15.3%
Fat	6.8%
Carbohydrate	65.1%
Fiber	1.9%
Minerals (osh)	4.7%
	Per Ounce
Calories	108
Calcium	216 mg.
Phosphorus	278 mg.
Iron	6.6 mg.
Thiamine	0.3 mg.
Riboflavin	0.051 mg.
Niacin	0.41 mg.

Political Medicine

STATUS OF HEALTH AND MEDICAL LEGISLATION

All bills which were not reported on unfavorably by the committees of Congress or were not specifically killed may be revived at any time between now and January 3, 1947. S. 1050 and S. 1606, the two Wagner-Murray-Dingell Bills, and S. 1318, the Pepper Bill, are not dead, only dormant. If the House of Representatives should go Republican this November, the President would face a two-year term of frustration. Favorable administration-sponsored legislation would be almost impossible of enactment. It has been rumored in the Senate that rather than two years of no social legislation Congress might be called back and could by clever legislative strategy pass some or all of these bills. The last four months of this year will be critical. Anything may happen.

When Senator Pepper gave up trying to get a favorable committee report on his bill, the Super EMIC S. 1318 he and Senator Taft introduced joint resolution 177, giving an increased appropriation to the Children's Bureau allowing it to carry on for the present. The grant was fixed as $23,000,000 as an increase in the social security appropriation. The Children's Bureau, by the President's government reorganization plan, has been transferred to the Social Security Board instead of the Public Health Service where it belongs. This has simply increased the funds available to the already too powerful Social Security Board. Government forces are still trying to revive the dormant S. 1318 which could be passed this year if Congress reconvenes.

* * *

ANALYSIS OF CURRENT LEGISLATIVE PROPOSALS TO NATIONALIZE MEDICINE IN THE UNITED STATES

By Marjorie Shearon, Research Analyst
Conference of the Minority, United States Senate
Presented at Annual Meeting of the National Industrial Conference Board, Waldorf Astoria, May 16, 1946

Compulsory sickness insurance is a controversial and little understood device of political action. Proponents of compulsion often vitiate their arguments with emotional appeals, dubious statistics, and offensive red herrings. Opponents, on the other hand, weaken their cause when they hurl unsubstantiated epithets of communism, socialism, and State medicine. Unfortunately, this branch of social insurance is so technical that few persons have either time or inclination to study its social and political implications. Yet, if a comprehensive system of Federal compulsory sickness insurance were to be established by Act of Congress, every man, woman, and child in the United States would be affected by the ensuing social revolution. Thus, regardless of the complexity of the subject, we should examine for our own protection not only the history of this political device but its administrative pattern, its social implications, and its fiscal burdens.

There are now before Congress two social insurance bills which were introduced last year by Senators Wagner, Murray, and Representative Dingell. One, S. 1050, is an omnibus bill that would establish a comprehensive national social insurance system including compulsory sickness insurance. That bill would broaden the coverage of the present Social Security Act and would increase both benefits and taxes. The second bill, S.1606, is, for the most part, lifted from the earlier omnibus bill; it deals with health and medical provisions only, and omits provisions for financing the compulsory sickness insurance scheme. Hearings on S.1606 are now being held before the Education and Labor Committee of the United States Senate.

When, on November 19, 1945, President Truman set forth his legislative program and when, on the same day, S.1606 was introduced in Congress, the plan to nationalize medicine ceased to be a matter merely of academic discussion. It became a political issue. As such it will be subjected to the white light of publicity. There will be a natural interest in the origin of such legislation. Who wrote it? Why does it arouse such vehement controversy? Is it fraught with danger as claimed?

The two Wagner-Murray-Dingell Bills of 1945 and the earlier version of 1943 in so far as they relate to compusory sickness insurance find their prototype in the insurance laws of Bismarck. During the decade of the 1880's Bismarck, acting on the recommendations of his economic adviser, Adolph Wagner, professor of political science at the University of Berlin, laid down the general principles of social insurance. Laws of sickness insurance, accident insurance, and old age insurance were enacted despite bitter opposition. It has been said that Bismarck's aim was, "first to muzzle the official Social Democrats, and then, by a series of small bribes, to wean the proletariat from their adherence to revolutionary principles."[1]

Bismarck translated into law the theories of the man who is credited with having done more than anyone else to give to state socialism its "scientific form and scientific foundation." Professor Wagner's social philosophy and total program for state control were outlined in an article published in 1887 in which he advocated public ownership of banking, insurance, communications, and utilities, and State "insurance against sickness, incapacity, and old age." He likewise proposed and justified a new scheme of taxation that would not only serve the legitimate purpose of raising revenues but would at the same time fulfill the purpose of what he called "regulative interference."

This "interference" was to operate by regulating first the distribution of income and wealth and second the purchasing power and living habits of the "lower classes." The latter form of "interference" was to be accomplished

(Continued on Page 1168)

1. Russell, Bertrand *"German Social Democracy,"* 1896 (London) p. 107.

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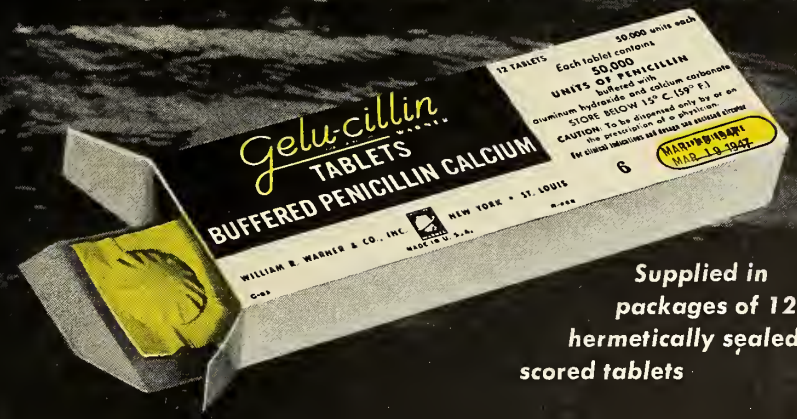
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ANALYSIS OF LEGISLATIVE PROPOSALS TO NATIONAL MEDICINE

(Continued from Page 1166)

"by administrative measures, and eventually by compulsion." Wagner stated, "This two-sided policy of taxation I call social. The second side here advanced . . . is based, as concerns the mass of the population, the lower labouring classes, on the assumption that in the truest interests of the nation a guardianship may and must be exercised over the national consumption or over the application of income to personal purposes."[2]

These "social" insurance laws, thrown as a sop to the socialist Cerberus, were acclaimed as "the high-water mark of German state socialism."[3] Designed to quiet the complaints of the socialists and at the same time to ease the burden on the local governments for care of the sick poor, they were pre-eminently political and economic devices rather than health measures. The law of sickness insurance was passed without the professional advice of health and medical experts and physicians; and administrative control was placed in lay hands. Bismarck, it is to be remembered, was hard pressed for funds. He was seeking new sources of revenue. In the guise of what he called "practical Christianity,"[4] he induced the Reichstag to approve his new plan for taxing the workers thereby making them shoulder the burden of most of their own poor relief. In return for their acceptance of the principle of "compulsion" and of control by a powerful bureaucracy, the "lower classes" were promised certain pitifully small and limited benefits which they might claim as a "right."

German sickness insurance was financed by taxes on employers and employees, the workers, until as late as 1934, paying two-thirds of the cost. The government provided the compulsion and interference; labor and management footed the bills. The doctors were squeezed between the upper and nether millstones of regulation and interference. Benefits were of two kinds: a cash sickness benefit equal to not less than one-half the daily wage, and free medical and hospital care during illness. Minimum benefits were for twenty-six weeks with optional extension to fifty-two weeks if funds were available. Small maternity benefits and death benefits were also provided. Originally coverage was limited to low-paid workers in a few occupations; ultimately it was extended to all manual workers and all others with incomes not exceeding 3,600 reichsmarks annually, so that, with dependents, two-thirds of the population was covered. Under the law, total "contributions," the euphemistic name given to the new taxes, could not exceed 7.5 per cent of earnings and usually were limited to 6 per cent. There was no state subsidy.

The Bismarck plan of social insurance has been adopted in over thirty countries, generally as a political, fiscal, and regulatory device. The schemes for compulsory sickness insurance have in the main followed the original pattern. While details vary from country to country the distinctive characteristics of compulsion and "regulative interference" persist. Indeed, they are integral parts of the scheme and are, as many persons believe, the inherent cause of its weakness. Some countries have broader coverage, others more restricted. Great Britain insured only 40 per cent of the population, and excluded dependents of workers. Russia, on the other hand, covered the entire population and carried the compulsory scheme to its logical conclusion by making all physicians the salaried servants of the State. New Zealand attempted complete coverage and a mixed system of payment for physicians. Thus, the framework and essential structure of the compulsory insurance features of the W-M-D Bills are neither new nor original. They are a composite of old-world statutes written in such a manner that they may be incorporated into a comprehensive system of Federally operated and controlled social insurance.

In considering the sickness insurance bills now pending before Congress it would seem to be advisable to investigate the efficacy of the Bismarck plan. How well has it worked in the 60 years of its operation? Has it been administratively satisfactory, politically desirable, and medically sound?

Some of the answers to these questions are to be found in an appraisal of the German system made by the man who is generally credited with being the leader of the movement to establish Federal compulsory sickness insurance in the United States. After studying the German and other European schemes he stated in 1936:

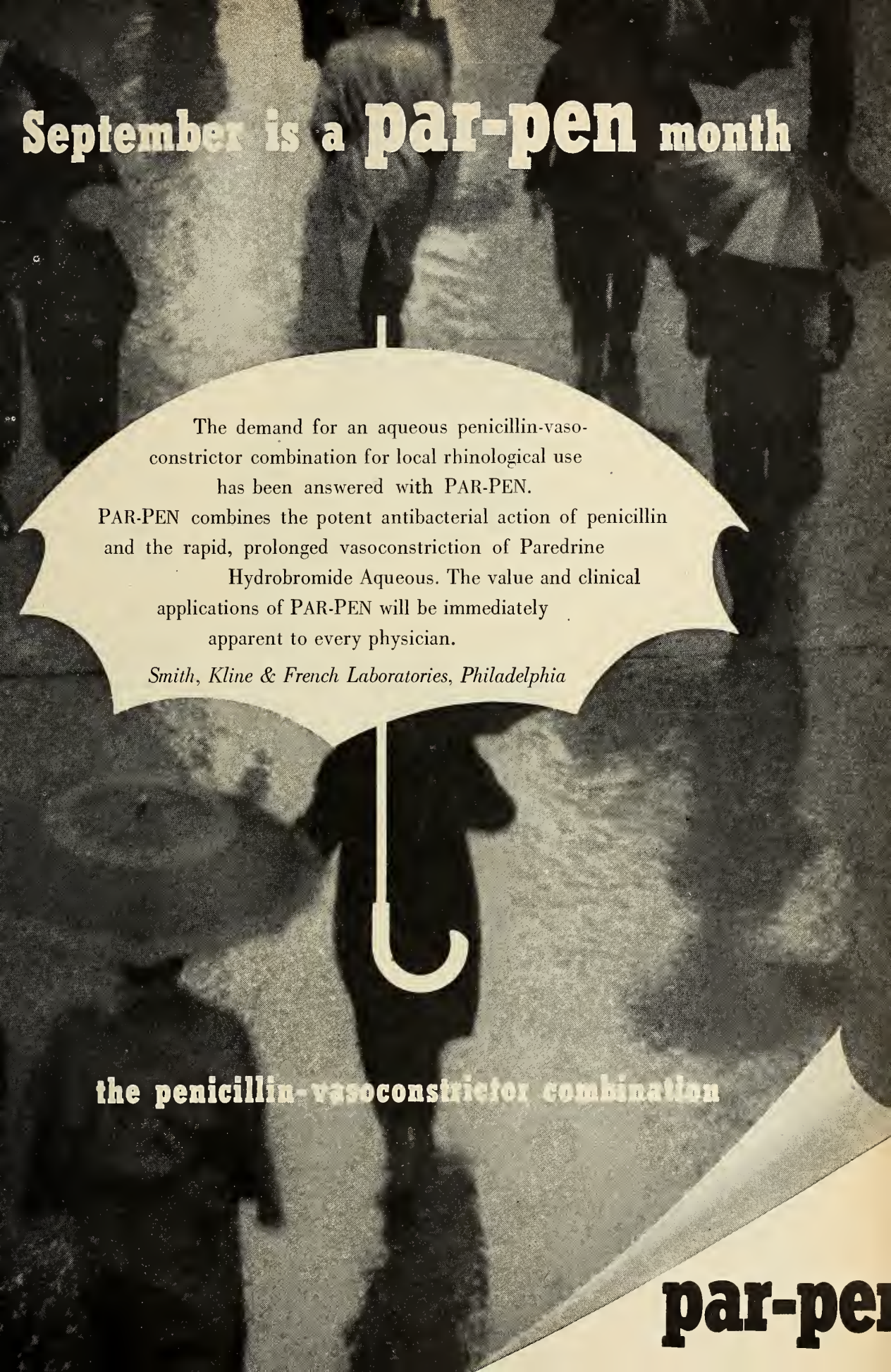
"Observers are in general agreement that the German sickness insurance laws and the central administration are very complex. For this there is a simple historical explanation and, perhaps we may say, justification. When first conceived, Bismarck contemplated a system which would absorb the existing insurance societies and provide for the formation of new ones. The State did not intend to contribute to the insurance benefits; the scheme was to be a mutual undertaking between employers and employees which the State was to supervise and regulate. In consequence, the benefits would be only those which the contributions from these two classes could finance.

"The State wished to make benefits appear as attractive as possible; but it dared not promise more than the contributors could and would support. The laws were therefore framed on the principle of specifying the minimum benefits which must be furnished and the maximum contributions which may be required. The system had to be framed to cover widely differing conditions among urban and rural communities and to meet the needs of all industrial classes, from the most substantial down to the dependent poor. Flexibility was therefore, essential, and *flexibility meant various, diverse, and complex legal provisions.*"[5]

The author of the volume on European sickness insurance to which I have just alluded then goes on to point out that the insurance societies responsible for administration of sickness insurance funds had devoted too little money to public health activities, spending in some years as little as 5 or 6 cents a person for the improvement of health. "In spite of evidence of improvement in this respect, sickness insurance in Germany has

(Continued on Page 1170)

2. Quotation from article in Tübinger Zeitschrift, published in 1887 and quoted by Dawson, William Harbutt, *Bismarck and State Socialism*, (London), 1891, pp. 156-158.
3. Dawson, W. H., *loc. cit.* p. 109.
4. "Practical Christianity," speech delivered by Bismarck, April 2, 1881. The German Classics, vol. X, 1914, pp. 221-243.
5. Falk, I. S., *"Security Against Sickness,"* 1936, p. 121.


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ANALYSIS OF LEGISLATIVE PROPOSALS TO NATIONAL MEDICINE

(Continued from Page 1168)

not been as completely as it might be 'health insurance.' "[6] It is further admitted that German insurance practitioners were underpaid and suffered from lay controls.

"From the outset, the insurance societies contracted with physicians to provide medical service and, of course, some of them sought individual physicians who would accept low rates. These were not always the best practitioners available to serve the insured population. Long and acrimonious wars have been fought among the societies, the professions, and the insured persons over the questions of 'free choice of doctor,' 'professional freedom from lay control,' 'adequate professional income,' 'red tape,' 'certification for disability' et cetera."[7]

In the light of these facts one may wonder why the Federal official who saw all the defects of compulsory sickness insurance should have written into the successive Wagner-Murray-Dingell Bills the very provisions which he admitted were provocative of discord and which were reasonably certain to lead to autocratic rule, red tape, and limitations on freedom.[8] The mixed system of remuneration of physicians which he has proposed has bankrupted one sickness insurance scheme and might be expected to do the same thing in this country.

It is being loudly proclaimed at this time the Federal sickness insurance legislation should be enacted forthwith in order to induce physicians to leave the cities and settle in rural areas. But the scheme did not have that effect in Germany where after 50 years' operation it was observed that "the physicians of Germany are located in excessive proportions in the large cities and in inadequate proportions in rural areas."[9] It has been stated repeatedly that the incomes of the majority of physicians would be improved under the provisions of the latest W-M-D bill. But insurance practice did not have that effect on the income of German physicians. In 1936 the same government official who has previously been quoted stated that:

"The inadequacy of professional income is even more discouraging in Germany than in the United States because it bears with unusual weight upon the insurance practitioners; whereas the less-than-average incomes of most physicians in the United States are 'compensated' by the greater-than-average incomes of the others; in Germany the less-than-average incomes occur mainly among insurance practitioners whose clientele is among the poor, and the greater-than-average incomes occur chiefly among non-insurance practitioners who serve private patients in the higher income classes."[10]

It is significant to note that following the National Socialist revolution in 1933 Hitler reorganized Germany's social insurance system. At that time, "the government's medical program was looked upon by many as one of the greatest props of the totalitarian state."[11] The "leader" idea was introduced into the insurance system, and Hitler issued a series of decrees in 1933, 1934, and 1935. "The new law, the decrees, and the regulations have profoundly changed the arrangements under which medical services are furnished. Where hitherto the contract of service had been left to each fund to be negotiated with each doctor, it is now a central contract governed by law and regulation."[12]

The two leading professional organizations of German doctors were dissolved. Hitler gave exclusive legal status to the sickness insurance doctors of Germany (the K.V.D.). This group was given authority by decree to furnish medical services to insured and uninsured persons and to decide on remuneration. It was given responsibility for the "punishment of its members."[13] In this connection, I would point out, as others have before me, that a comprehensive government sickness insurance scheme with its nation-wide bureaucratic machinery lends itself to administrative abuses with peculiar ease when the central power passes to a sadistic leader of the Hitler type. Punishments are devised for physicians and patients; the rights of the individual are abrogated. This was done in Germany. It could be done here.

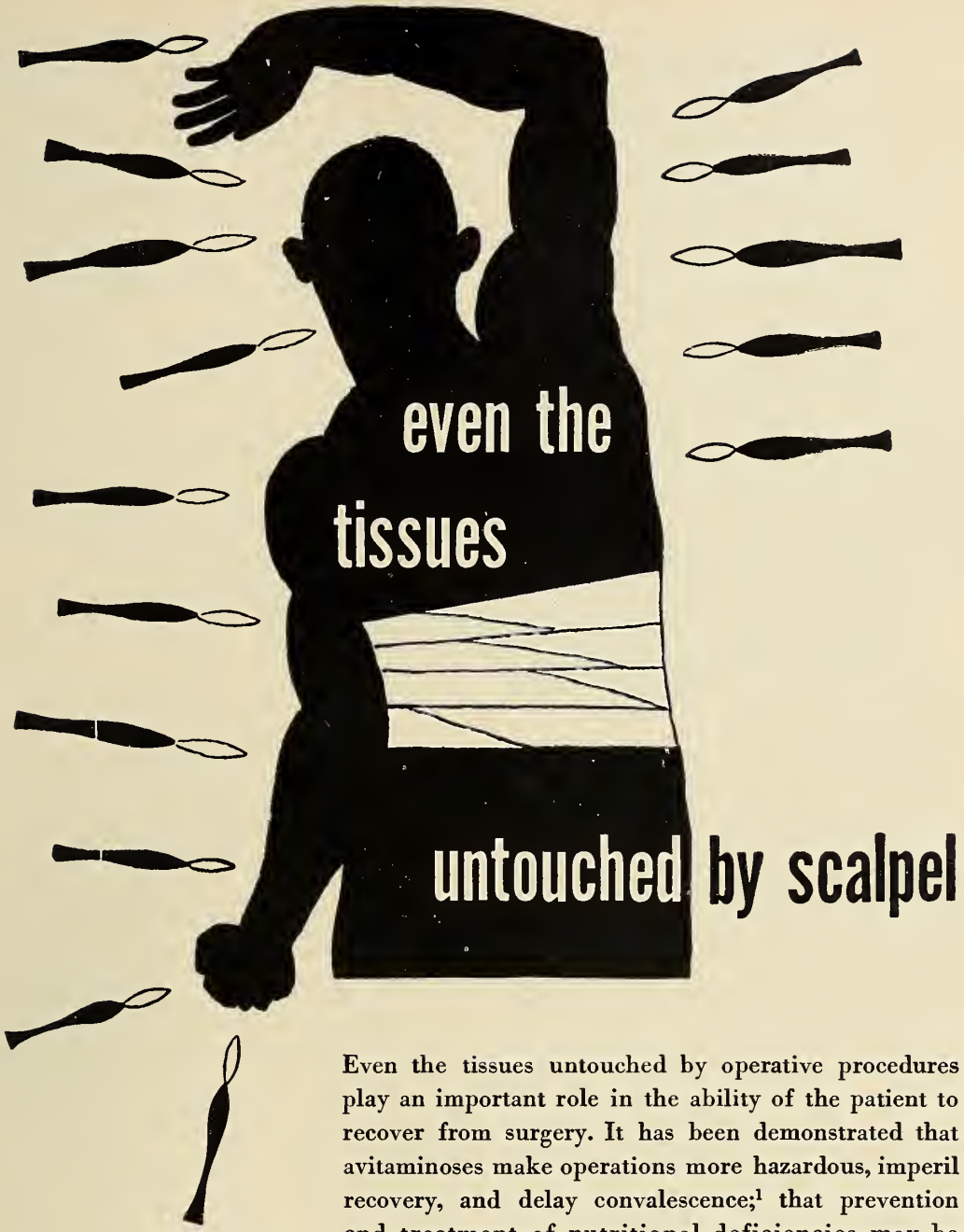
It is obviously impossible in this short statement to enter into an exhaustive discussion of the attributes of a compulsory sickness insurance program. I should however, like to say a few words about the operation of the principle of "regulative interference." The claim is frequently made that compulsory sickness insurance does not change the practice of medicine. Patients, it is said, will be free to enter or remain out of the system; physicians will enjoy similar freedom. Patients may freely choose their physicians from among those who have consented to become insurance practitioners and have signed a contract with the Federal Government to abide by the rules and regulations to be issued in Washington.

Is this freedom? Patients would have about as much freedom as a prisoner in a Federal penitentiary would have if given the choice of working on the rock pile or in the prison laundry. Physicians on their part would be expected to make a blind date with the officials in Washington who would one day promulgate the insurance rules and regulations which would have the force of law.

First, what about patients? Under the latest W-M-D Bill, insured persons would be given the following degree of freedom. Once the law went into effect every insured person would be informed as to the doctors in his particular insurance district who had agreed to become insurance practitioners. If the panel or capitation system such as is used in Great Britain, were adopted, there would be a limitation of say, 1,000 or 1,500 patients per physician. Insured persons would be given a certain period of time to sign up on some doctor's panel. If they failed to act they would, after due notice, be assigned to some doctor by the Surgeon General of

(Continued on Page 1172)

6. *Loc. cit.*, p. 134.
7. *Ibid.*, p. 124.
8. See *testimony of Arthur J. Altmeyer* before the Senate Committee on Education and Labor, *Hearings on S.1606* April 4, 1946, that I. S. Falk, Director of Bureau of Research and Statistics, Social Security Board, wrote the major portion of the provisions of S.1606.
9. Falk, I. S., *loc. cit.* p. 130.
10. Falk, I. S., *loc. cit.* pp. 130-131.
11. *Health Insurance, Report of the Advisory Committee on Health Insurance*, 1943, Montreal, Canada, p. 108.
12. Falk, I. S., *loc. cit.*, 138.
13. *Ibid.*, p. 138.



Even the tissues untouched by operative procedures play an important role in the ability of the patient to recover from surgery. It has been demonstrated that avitaminoses make operations more hazardous, imperil recovery, and delay convalescence;[1] that prevention and treatment of nutritional deficiencies may be "decisive"[2] in recovery following surgery. In the field of oral and parenteral vitamins, Upjohn offers a full range of highly potent, convenient to administer, economical vitamins.

1. Virginia M. Monthly **72**:240 (June) 1945.
2. Am. J. Surg. **54**:299 (April) 1942.

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ANALYSIS OF LEGISLATIVE PROPOSALS TO NATIONAL MEDICINE

(Continued from Page 1170)

the Public Health Service or his local representative. Clearly there would be a rush to get on the panels of those doctors who were considered to be the best in the community—assuming that they would consent to enter the system. Persons who delayed or were recalcitrant would have to take the less satisfactory doctors or would compulsorily be assigned to doctors whose lists had not filled rapidly. Persons moving into the neighborhood would have to be content with the left-overs. If it so happened in a small community that none of the doctors was particularly good, insured persons would still be compelled to sign up with them and could not make arrangement with better qualified doctors in adjoining communities, unless they did so at their own expense in addition to paying their increased social security taxes and income taxes. Under the panel system of insurance practice the insured person becomes a pawn to be placed on panels at so much per head per year for the purpose of guaranteeing to physicians minimum incomes which tend in time to become maximum incomes.

Under the W-M-D Bill a specialist would be available as a rule, only on the advice of the insurance doctor. Obviously there might be occasions when a patient would demand a specialist and the insurance practitioner in the interests of economy would refuse his consent. In such a case the patient would be compelled to refer his appeal for the services of specialists and consultants to the local medical administrative officer appointed by the Surgeon General. Anyone who has endeavored to obtain quick action on an appeal to a government agency in connection, let us say with an OPA regulation, will appreciate that a critically ill patient would probably be dead before he could obtain a ruling on his "right" to specialist and consultant services.

This is what is meant by regimentation and regulation of patients. This, multiplied a thousandfold. It is claimed that under the W-M-D Bills insured persons would receive "the best modern medical care." The Bill does not so promise. Instead, it specifies cheap and limited services. It would, for instance, pay hospitals "not less than $3 and not more than $7 for each day of hospitalization, not in excess of thirty days." This implies ward service. Indeed, the language in the bill refers to payment for "essential hospital services, including the use of ward or other least expensive facilities compatible with the proper care of the patient." Always the emphasis is on economy, on the protection of the insurance funds rather than on the "*best* modern medical care" which is nowhere mentioned in the Bill.

The claim is made that patients not only have freedom of choice of physicians but that they may change doctors if they are dissatisfied. Again, they have that brand of freedom that is permitted under Government dictatorship. If we may judge by the "freedom" accorded insured persons in other countries, it is perfectly clear that such limited freedom as will be enjoyed will obtain at the moment of entering the system. It does not mean freedom to pick the doctor you want at the time of sickness which may be months or years after the date of entry into the sickness scheme. In Great Britain, the patient seeking to change insurance doctors must obtain the written consent of the doctor who is being dropped and of the doctor whose services are sought. But the need for change generally arises as an emergency matter when minutes may mean the difference between life and death for the patient. Perhaps under the new dispensation, death, before striking, will wait for an official O. K. from Washington.

We can presently be philosophical about Government red tape in connection with controls over industry, consumers goods, and prices. We look forward to the day when such controls will be removed. There is something grimly humorous about interminable forms in triplicate and about the Government run-around by OPA. One can even believe—albeit with difficulty—that one still has a court of last resort when one is told that if dissatisfied with the ruling of the administrator in a regional office, one may, within ninety days appeal to the authorities in Washington by filing the appropriate official forms (seven copies, please). If one is still dissatisfied there is a modicum of comfort in knowing that one may finally appeal to the Supreme Court of the United States. This routine may have elements of humor when inanimate goods are concerned. There would be nothing humorous if a life were at stake. Nor can it be argued that analogies are farfetched.

The degree of "regulative interference" with patients and physicians under the British and German sickness insurance schemes is unbelievable. Consider the provisions of the German Insurance Code with respect to hospital treatment. Economy of administration is the dominant note. Thus, when it appears to an insurance practitioner that a patient should be hospitalized the code specifies that, "The attending practitioner must prove the necessity of hospital treatment in writing." Furthermore, the code and contract regulations specify that:

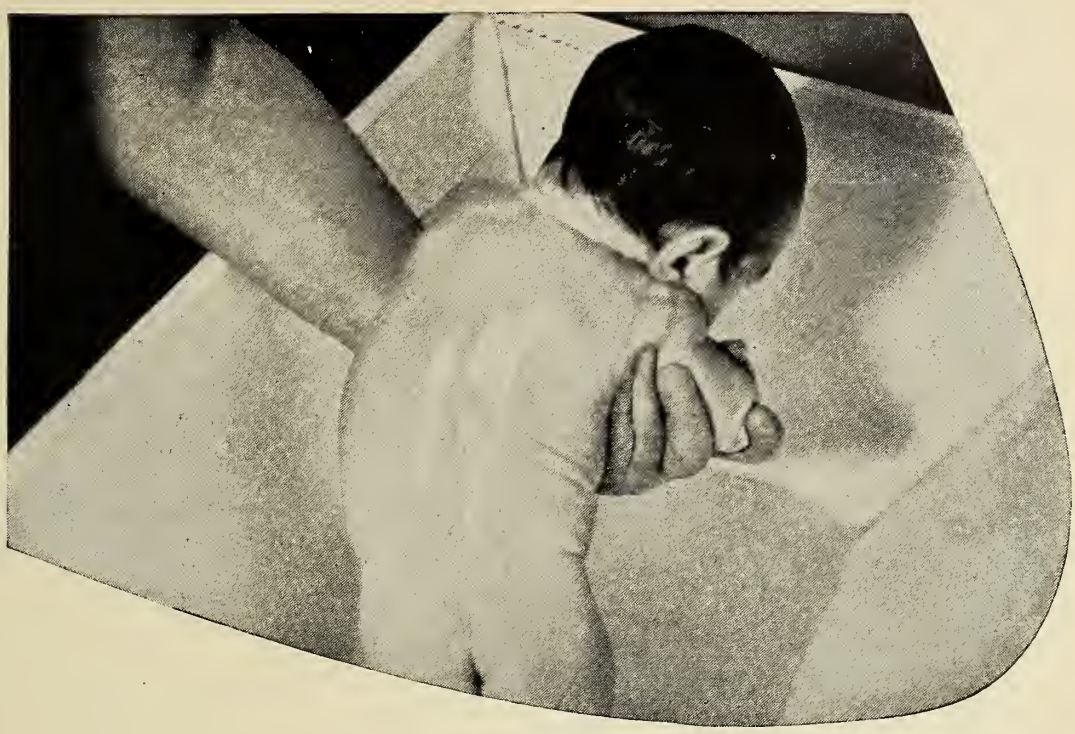
"The consent of the sickness fund must be obtained before admission to hospital except in urgent cases. The patient's consent is not required (i) if the nature of the illness is such that treatment and nursing cannot be given at the home of the patient; or (ii) if the disease is infectious; or (iii) if the patient repeatedly disregards the doctor's instructions or the rules for the conduct of patients."[14] Is this regimentation?

The insurance system in Germany is policed by medical referees "in respect of the economy and the standards of medical treatment." Medical referee service centers are set up, there being one medical referee for every 25,000 insured persons. These medical referees, among their many duties, "are consulted, if required, before admission of patients to hospitals."[15]

Doctors are under strict control with respect to the prescriptions they may write. "The standard cost of prescribing per case treated is fixed in the national agreement for the whole country." If on investigation by

(Continued on Page 1174)

14. *Economical Administration of Health Insurance Benefits,* International Labour Office, Studies and Reports, Series M (Social Ins.) No. 15, Geneva, 1938, p. 19.
15. *Ibid.,* p. 206.



First breath, first bath, first bottle

In a life filled with "firsts", baby has no time to cope with such gastro-intestinal problems as carbohydrate fermentation and attendant distention and diarrhea—particularly during his first few weeks.

'Dexin' has proven an excellent "first carbohydrate" because 1) its high dextrin content is not fermentable by the organisms usually present in the intestinal tract, and 2) because it promotes the formation of soft, flocculent, easily digested curds.

Simply prepared in hot or cold milk, 'Dexin' brand High Dextrin Carbohydrate is easily adapted to increasing formula needs from month to month, and later, being palatable but not too sweet, is a welcome supplement to other bland foods. 'Dexin' *does* make a difference.

'Dexin' HIGH DEXTRIN CARBOHYDRATE
BRAND

Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association.

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ANALYSIS OF LEGISLATIVE PROPOSALS TO NATIONAL MEDICINE

(Continued from Page 1172)

a medical referee it is decided that an insurance doctor has written prescriptions that are deemed too expensive or has prescribed costly new drugs without sufficient justification, the doctor may be penalized by having the excess amounts deducted from his government reimbursement. Such prohibitions ultimately lead to rigidity.

These are a few of the restrictions that hamper physicians under compulsory sickness insurance schemes. They are to be found in the rules and regulations in all countries having medical insurance benefits; such regulations are numbered by the thousand. This is what is meant by regimentation of doctors and patients. This is what lowers the quality of medical care, stifles initiative.

The International Labour Office has published an exhaustive volume entitled *Economical Administration of Health Insurance Benefits.* The first part consists of 133 pages describing "The Principle of Economy in Administration of Health Benefits" the second part consisting of 173 pages is devoted to "The Principle of Economy in National Laws and Regulations." There are rules for the conduct of patients, rules for doctors, rules for hospitals, rules for prescribing, et cetera. The basic law, complex as it is, is but a very small part of the regulatory machinery of sickness insurance. Thus, in Great Britain the laws of national health insurance, the rules and regulations and the interpretation thereof are set forth in a volume nearly 1,300 pages long[16] and every insurance practitioner has on his desk a volume of over 350 printed pages known as the "Doctor's Bible," which informs him as to what he may or may not do.[17]

It is of the utmost importance to realize that the three Wagner-Murray-Dingell Bills were not drafted along American lines but are in direct conformity with the international provisions which have been laid down by the International Labour Office; these in turn largely reflect the German viewpoint with respect to the nationalization of medicine and the concentration of power in central governments.

With reference to the two 1945 W-M-D Bills, I wish especially to direct attention to the devices employed for the purpose of conferring vast power on the Social Security Board. First, there is created a "National Social Insurance Trust Fund" which is to be held by a Board of Trustees consisting of the Secretary of the Treasury, the Secretary of Labor, and the Chairman of the Social Security Board. To this Trust Fund would be transferred all the present assets of the Federal Old-Age and Survivors Insurance Trust Fund. Into this Fund there would pour all the new and greatly increased social security taxes—four per cent of payrolls from employers and four per cent from employees, plus five per cent of the income (up to $3,600) of self-employed persons, and such other tax receipts as may be paid in the form of premiums for insurance for State employees and statutory beneficiaries, plus, finally, the Government subsidy which may run as high as fifty per cent of the cost of the comprehensive program. (In Great Britain it is estimated that 61 per cent of the cost of financing the Beveridge plan will devolve upon the Exchequer.)

The Social Security Board, instead of the Bureau of Internal Revenue, would collect the taxes. The Board would unquestionably play a dominant role in the management of the Fund. Furthermore, although all the *health funds* of the country would presently or ultimately flow into this National Social Insurance Trust Fund and would constitute approximately one-fourth thereof, the W-M-D Bill (S.1050) does not include on the Board of Trustees any representative of the health and medical professions. Despite assurances that the health funds would be protected, the fact remains that they would be controlled by laymen and that the Surgeon General of the Public Health Service would have to go hat in hand to the chairman of the Social Security Board for approval of the contracts he would make with hospitals, doctors, and dentists. This bill would subordinate the health interests of the country to an agency—the Social Security Board—which has on its staff, so far as I know, not a single licensed practitioner of medicine.

The bills are so drafted with respect to compulsory sickness insurance that the main administrative authority over the lives of all the people in this country would be subtly vested in the Social Security Board. Note the language of S.1606. The Surgeon General is authorized to draft the all-powerful rules and regulations for the compulsory sickness insurance scheme, but he may not perform this, his most important administrative function, until he has consulted the Social Security Board and obtained the approval of the Federal Security Administrator. He must consult with the Social Security Board when he makes studies and recommendations concerning the provision of personal health services. He cannot make a move without consulting a lay Board which is unskilled in medical matters and without obtaining the approval of the Federal Security Administrator who himself is not a physician.

These may seem like unimportant details until it is realized that they are the essence of control. The statutory provisions which have been deftly woven into the Wagner-Murray-Dingell Bills relate particularly to (1) the control of the National Social Insurance Trust Fund, in which may some day be deposited upward of one-fourth the annual national income, and (2) the top policy-forming council—the so-called National Advisory Social Security Policy Council, which is appointed by the Social Security Board. The Policy Council is not limited in size and power as is the insignificant and wholly inadequate National Advisory Medical Policy Council which the Surgeon General is permitted to appoint. Although there is no statutory provision for inclusion among its members of any health or medical representatives, the Social Security Policy Council is authorized *inter alia* to make findings and recommendations on the "administration of medical, hospitalization, and related benefits. This extraordinary provision would

(Continued on Page 1176)

16. Lesser, Henry, *The National Health Insurance Acts 1936-38* London, 1939, p. 1281.
17. Harris, R. W., and Sack, Leonard Shaeter, Medical Insurance Practice, British Medical Assoc., 1937, p. 383.

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HEMORRHOIDS • ANAL FISSURES • PRURITUS ANI ET VULVAE



Nupercainal helps the most

Nupercainal, the soothing anesthetic ointment containing 1% Nupercaine, is noted for its sustained effect in the relief of pain associated with the above and other ano-rectal conditions.

Many physicians employ Nupercainal, too, in painful proctological and vaginal examinations.

Available in tubes of 1 ounce with applicator and in jars of 1 pound.

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Nupercainal and Nupercaine...*Trade Marks Reg. U. S. Pat. Off.*

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ANALYSIS OF LEGISLATIVE PROPOSALS TO NATIONAL MEDICINE

(Continued from Page 1174)

permit determination of high policy in connection with the national health program by professionally unqualified, non-medical advisers. I believe it to be an extremely dangerous provision.

The suggestion has frequently been made that amendments should be proposed to the sickness insurance title of the latest W-M-D Bill and that the Bill might thus be made acceptable to freedom-loving Americans. This is like asking a builder to remodel Alcatraz into a California bungalow. One cannot have freedom within the framework of compulsory sickness insurance. It is political and bureaucratic double talk to speak of freedom and compulsion as conditions which may be enjoyed simultaneously. Perhaps the people of America wish to seek health under a scheme of nationalized medicine. But I doubt if that is the case. To the extent that they are "sold" on the idea they have been "sold" by glittering promises that cannot be fulfilled. And, I might add, they have been sold down the river.

It would be impossible for a mere three per cent of payrolls to deliver to the American people the type of best and complete modern medical care that has been promised. We would not have the facilities or the health personnel even within ten years. It would take the full time of all the doctors in the country to spend as little as two hours a year on complete health examinations for everyone in the country. The gap between the promises in connection with the W-M-D Bills and the possible performance is indicative of a lack of candor on the part of Government experts who withhold from Congress and the public the facts which they have in their possession and which should be made public.

If the companion W-M-D Bills were to be enacted, the only thing that would be sure to materialize would be the proceeds of the tax provisions. Whether or not the government could deliver the health and medical services it promises, the National Social Insurance Trust Fund would bulge with new revenues. A bureaucracy with undreamed of power would be established which would be felt in every one of the more than 150,000 political subdivisions of the United States. Every family would pay tribute to the Social Security Board for the support of the system of nationalized medicine, to say nothing of other parts of the national social insurance system for which there is considerable valid justification.

That such legislation would lead to the abolition of the private practice of medicine is freely admitted by the International Labor Office in a recent pamphlet in which this statement appears[18]:

"The fact is that once the whole employed population, wives and children included, is brought within the scope of compulsory sickness insurance, the great majority of doctors, dentists, nurses, and hospitals find themselves engaged in the insurance medical service, which squeezes out most of the private practice on the one hand, and most of the medical care hitherto given by the public assistance authorities on the other. The *next step to a single national medical service is a short one. . . .*" (italics mine).

18. *Approaches to Social Security*, International Labour Office, Montreal, Canada, 1942, pp. 50-51.

MICHIGAN MEDICAL SERVICE

(Incorporated under the laws of Michigan as a non-profit medical care corporation)

Balance Sheet, as at June 30, 1946

ASSETS

Demand deposits in banks and cash on hand		$ 775,057.86
Investments, at cost:		
U. S. Government securities:		
Treasury Notes, Series B, 1¼ pct., 1947	$100,000.00	
Savings Bonds, Series G, 2½ pct., 1956 (present redemption value $96,200)	100,000.00	
Savings Bonds, Series G, 2½ pct., 1957 (present redemption value $96,900)	100,000.00	
Treasury Bonds, 2¼ pct., 1959-62	600,000.00	
Dominion of Canada bonds:		
5th Victory Loan, 3 pct., 1956-59	93,125.00	
6th Victory Loan, 3 pct., 1957-60	46,437.50	
7th Victory Loan, 3 pct., 1959-62	46,312.50	
		1,085,875.00
Accrued interest receivable		5,045.08
Subscription fees receivable:		
Due from Michigan Hospital Service	$140,805.15	
Due from subscribers	124,997.76	
		265,802.91
Account receivable, Veterans Administration		33,444.70
Accrued services of doctors to be billed to Veterans Administration		54,660.30
		$2,219,885.85

LIABILITIES

Accounts payable:		
Michigan Hospital Service	$ 14,585.56	
Vendors	2,852.15	
Employees, for U. S. Savings Bonds	159.93	
Employees' income taxes withheld	2,169.78	
Unclaimed checks	1,666.50	
		$ 21,433.92
Accrued expenses:		
Salaries	$ 2,400.27	
Social security taxes	1,695.07	
		4,095.34
Unearned portion of subscription fees		291,697.60
Reserve for payment to doctors for services rendered:		
To subscribers, estimated (Note A)	$872,000.00	
To veterans	54,660.30	
		926,660.30

RESERVE FOR CONTINGENCIES (NOTE B)

Balance, July 1, 1945	$513,240.87	
Net income for the year, as annexed	462,757.82	
Balance, June 30, 1946		975,998.69
		$2,219,885.85

The accompanying notes are an integral part of this balance sheet.

NOTE A: This reserve is for all services rendered by doctors to subscribers, unpaid as at June 30, 1946, including estimated amounts for services rendered prior to June 30, 1946 and not reported as at July 31, 1946.

NOTE B: The Board of Directors, on October 3, 1945, directed that all surplus funds of the corporation be designated, for accounting purposes, as Reserve for Contingencies.



"It's only a cold, doctor..."

"But it sure would be nice to breathe again!" The patient's a little apologetic for calling you in on just a cold—but fearful that it might turn into "something serious".

With Sulmefrin, you provide that welcome *relief* through nasal decongestion and drainage plus the necessary *protection* resulting from its bacteriostatic action. Thus the danger of sinusitis, bronchitis and mastoiditis may be considerably lessened.

Sulmefrin affords the benefits of sodium sulfathiazole anhydrous 1.25% and sodium sulfadiazine 1.25% with the *safe* decongestive properties of 0.125% *dl*-desoxyephedrine hydrochloride in a stabilized aqueous vehicle.*

**Sulmefrin*

TRADEMARK

SQUIBB

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

War Medicine

EMOTIONAL ATTITUDE GREATEST BARRIER TO RECOVERY FROM APHASIA, SGO REPORTS

Among the war's victims are men who can write but not read, read but not comprehend spoken language, read with the eyes but not read aloud.

There are many other weird combinations of disabilities. The general condition is known as aphasia. It is due, in most cases, to injury of some specific area of the brain, associated with the particular activity in which the victim has lost his ability to function.

The brain generally is a quite adaptive organ. When one area is injured, nearby brain tissue often is able gradually to take over its functions. Hence, aphasias are seldom permanent if treated promptly, but while they last the patients often are in a pitiable condition with little real hope, despite assurances, that they ever will recover.

Various means of speeding the brain readjustment are being tested in army hospitals by medical and psychological officers. Often the greatest barrier to quick recovery is the emotional attitude of the victim, according to the report just made to Major General Norman T. Kirk, the surgeon general of the army, by Captains Louis Lin and Martin H. Stein. They found that considerable improvement could be brought about very rapidly, in selected cases, by doses of the relaxation drug, sodium amytal, along with correlated psychotherapeutic techniques. Apparently it gives the injured soldier a respite from worry, which is all the brain needs to cure itself.

They cite some dramatic cases. One young soldier had been wounded by a shell fragment on the left side of the brain. The result was partial paralysis on the right side of the body. He understood speech fairly well, although he made occasional errors. He comprehended written material, but was unable to read it aloud. He could obey simple commands and could distinguish right from left.

Re-examination after a single dose of sodium amytal revealed an increase in vocabulary, in complexity of sentence structure, and in quality of words. His mispronunciations were fewer.

Another man, also with a gunshot injury to the left side of the brain, understood spoken and written speech readily but was unable to speak except in simple phrases. He was able to name many common objects, but had great difficulty with slightly more complex ones. After one dose of sodium amytal he was able to express himself in complete sentences and name many of the less familiar objects which he had been unable to name before. He said that he had regained in a few minutes all he had lost during the painful process of evacuation.

Apparently all that is accomplished by the sodium amytal—several similar drugs probably would have as good an effect—is to let down temporarily the emotional barriers and give a patient more confidence in himself. However dramatic the results, the drug *per se* does not help restore the brain functioning. This often requires long and patient retraining, on which a recent conference was held at the office of the Surgeon General. It is practically necessary to use the methods of the kindergarten, or even those by which infants are taught to talk, with intelligent, well-educated adults. Some of these methods, with essential variations, were discussed at the conference.

LEADING PHYSICIANS AND SURGEONS NAMED AS CONSULTANTS TO SECRETARY OF WAR

Appointment of fifty-eight prominent civilian surgeons and sixteen leading civilian physicians as consultants to the Secretary of War through the Surgeon General was announced by the War Department.

The surgeons and physicians, all of whom are specialists in their respective fields, are for the most part former medical corps officers who served with distinction during the war. Located strategically throughout the country, they were appointed as part of the Army Medical Department's program to maintain the highest possible standards of medical practice. Their aim will be to evaluate, promote and improve, wherever possible, the quality of medical care given the American soldier.

Major General Norman T. Kirk, the Surgeon General, under whose direction the armed services' medical consultant program was initiated during the war, termed the selections an important step in the advancement of military medicine. As the army enlarges its program, more specialists will be named to consultant rosters in surgery, medicine and neuropsychiatry.

Throughout the war, civilian and military medical experts constantly checked conditions and recommended improvements in the army's medical program. The same consultant program is also practiced overseas, with commanders vested with authority to assign medical experts from within the army as consultants or employ the services of known medical leaders from civilian populations abroad.

The surgeons whose appointments were announced are associated with the Surgical Consultants Division, Office of the Surgeon General, of which Colonel Frank L. Cole, Medical Corps, is Director. The physicians are in the Medical Consultants Division, Office of the Surgeon General, of which Colonel Arden Freer, Medical Corps, is Director.

Appointees as general surgical consultants and their specialties are: Dr. Henry K. Beecher, Massachusetts General Hospital, Boston, Mass., anesthesia; Dr. Sterling Bunnell, 516 Sutter St., San Francisco, Calif., plastic surgery; Dr. Edward D. Churchill, Massachusetts General Hospital, Boston, Mass., general surgery; Dr. Paul E. Klopsteg, 2424 Lincolnwood Dr., Evanston, Ill., orthopedics; Dr. Norton Canfield, New Haven Hospital, New Haven, Conn., otolaryngology; Dr. Champ Lyons, Tulane University Medical School, New Orleans, La., general surgery; Dr. M. Elliott Randolph, 11 E. Chase

(Continued on Page 1180)

A GREAT STEP FORWARD *in rickets prevention*



Effective, reliable antirachitic medication administered only once each month is truly a great advance. Thorough clinical application has demonstrated the effectiveness and safety, as well as the material economy, of this method of administering vitamin D.

Once a month administration



provides adequate dosage for rickets prophylaxis

This single monthly dose is more than just a convenience—it helps guarantee accurate dosage by parents who might ordinarily forget, or vary it from day to day.

Each capsule of Infron Pediatric contains 100,000 U.S.P. Units of vitamin D—Whittier Process—*especially prepared for pediatric use.*

Infron Pediatric is readily dispersible in the infant's feeding formula, milk, fruit juices, or water, and can also be mixed in cereal.

Infron Pediatric is economical—one package contains six monthly administrations, each in an easily opened capsule container.

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Wolf, I. J.: J. Ped., 22:707-718 (June) 1943

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Wolf, I. J.: J. Med. Soc. New Jersey, 38:436-440 (Sept.) 1941

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LEADING PHYSICIANS AND SURGEONS NAMED AS CONSULTANTS

(Continued from Page 1178)

St., Baltimore, Md., ophthalmology; Dr. R. Glen Spurling, Heyburn Building, Louisville, Ky., neurosurgery; Dr. Derrick T. Vail, 55 E. Washington St., Chicago, Ill., ophthalmology; Dr. Phillip D. Wilson, 321 E. 42nd St., New York City, orthopedics; Dr. Michael E. DeBakey, Tulane University, New Orleans, La., general surgery and military surgery history; Dr. Frank D. Lathrop, 605 Commonwealth Avenue, Boston, Mass., otolaryngology.

* * *

Fifth Army Area: Dr. Joseph W. Gale, Wisconsin General Hospital, Madison, Wis., general surgery; Dr. Henry G. Hollenberg, 3421 Hill Rd., Little Rock, Ark., general surgery; Dr. James M. Winfield, College of Medicine, Wayne University, Detroit, Mich., general surgery.

* * *

Percy Jones General Hospital, Battle Creek, Mich.: Dr. Carl E. Badgley, University Hospital, Ann Arbor, Mich., orthopedics.

ARMY'S INDUSTRIAL MEDICAL PROGRAM OF POTENTIAL BENEFIT TO INDUSTRY

Surveys of army-operated plants were made by the Army Industrial Hygiene Laboratory, covering atmospheric conditions, ventilation, illumination, toxic gases, fumes and dusts. Samples were collected and sent to the Laboratory for analysis.

An industrial medical officer was assigned to duty in the medical branch of each of the Service Commands, and an industrial hygiene officer also was stationed in each Service Command.

These officers visited all the army-owned plants, in their Service Command jurisdiction, checking the carrying out of the program, inspecting working conditions and followed through on surveys made by the Army Industrial Hygiene Laboratory and the U. S. Public Health Service.

Mass tuberculosis surveys, using 35 mm. chest x-ray equipment, were made in army-owned and operated plants, through co-operation with the U. S. Public Health Service.

In some plants, which were spread out over a wide area because of the nature of their work, such as explosive manufacture, mobile first aid units were established. These proved valuable in conserving man-hours by bringing first aid service to the employe on the job, and in conserving medical personnel. In isolated communities, where housing developments were provided for employes, the army gave medical service and hospitalization to these employes and their dependents. Construction of hospitals was authorized.

In many army-operated plants the pre-employment physical examination was given with chest x-ray, and frequently with serological tests for syphilis where facilities were available. Persons with open, infectious lesions of syphilis were not employed except when under treatment that rendered them non-infectious. No such persons were allowed to work with chemicals or toxic substances which might affect the liver. Although there were some deaths from occupational disease, the industrial hygiene program reduced occupational disease to the point where it was infrequent.

Medical personnel in army plants were instructed not only to render emergency care of the sick and injured but to become familiar with types of operations going on in the plant, so that occupational illnesses and hazards could be reduced to the minimum.

Doctors were assigned in ratios of not less than one to 3,000 employes, with the ratio higher in explosive and chemicals plants. The ratio of nurses to employes was set at about one to 750 to 1,000.

Employment of the physically handicapped was stressed in army plants and valuable experience was gained which could be of value to private industry.

It was the experience of the Army that female employes could be used as efficiently and safely as men, other conditions being equal. No evidence was found that women are more susceptible to chemical intoxication than men. Other problems, however, arose from the fact that women on the whole are shorter, lighter and less strong than men, for whom most factory machines are designed. Special consideration had to be given to problems of seating, reaching, leverage, size of handles, et cetera, and in some cases alterations in guards, tools, et cetera, were necessary to prevent fatigue and resulting illness and employe turnover. Many women workers also had a dual responsibility, that of home duties in addition to their work at the plant, and this plus pregnancy, dysmenorrhea and the menopause required careful placement and regulation of hours of employment.

Rules governing employment of pregnant women were as follows: No pregnant woman should work after the thirty-second week of pregnancy; she should not return to work until six weeks after delivery; pregnancy should be reported to the industrial medical department so that proper supervision could be exercised; pregnant women should report every two weeks so that the nature and hours of their work could be regulated; pregnant women should not work between the hours of 12 midnight and 6 a.m. or for more than forty-eight hours per week, with two ten-minute rest periods during the work shift if possible; no heavy lifting or strain, or other hazardous work; provisions for maternity care and leave should not jeopardize the employe's job or her seniority privileges unnecessarily.

Following are excerpts from Army Regulations No. 40-220, dated October, 1945, governing the Army's industrial medical program:

"1. General.—Civilian employees of War Department installations manufacturing, processing, storing, shipping or repairing supplies and equipment will be afforded an 'on-the-job' medical and surgical service; they will be assured that they are physically fit for the job assigned, and that safe and hygienic working conditions will be maintained. . . .

"2. Emergency medical and surgical service. (a) *Occupational illness or injury.*—An employee sustaining

(Continued on Page 1182)



to combat

mental depression in the menopause

". . . because the involutional period is fraught with sadness the different forms of mental disorder of this age may be highly colored with mental depression."*

Severe menopausal depression, marked by apathy and psychomotor retardation, is frequently progressive. Hence, if not promptly and effectively treated, it may seriously impair the patient's normal capacity for useful living.

In such cases, Benzedrine Sulfate helps to overcome the depression, to restore optimism and to reawaken the savor and zest of life. Needless to say, Benzedrine Sulfate is not indicated in the casual case of low spirits, as distinguished from true prolonged mental depression.

*Hinsie, Leland E.: The Person in the Body, an Introduction to Psychosomatic Medicine, New York, W.W. Norton & Co., 1945, p. 223.

b

Tablets and Elixir

benzedrine sulfate

(racemic amphetamine sulfate, S.K.F.)

Smith, Kline & French Laboratories, *Philadelphia, Pa.*

ARMY'S INDUSTRIAL MEDICAL PROGRAM

(Continued from Page 1180)

an illness or disease proximately caused by the employment or any injury while in the performance of duty, whether or not disability has arisen, will be furnished such care and treatment as are necessary under the circumstances. Cases which require treatment of a more definitive or prolonged nature than the medical personnel and facilities of the installation are prepared to render will be referred to physicians or hospitals designated under 'Regulations governing the Administration of the United States Employees Compensation Act of 7 September 1916.' If the industrial medical department is adequate from a personnel and equipment standpoint to render necessary treatment and the employee can attend such department as an ambulatory case, this treatment will be afforded the employee throughout the course of his injury or illness.

"(b.) *Nonoccupational illness or injury.*—If an employee consults the medical department for nonoccupational injury or illness during working hours, emergency treatment will be given to conserve time. Nonoccupational illness or injury requiring continuing medical care will be referred to the employee's private physician, who will on proper request be afforded such information as is available in the medical department concerning the employee. It is not the aim of the Army industrial medical program to interfere with that medical service which should be rendered by civilian physicians of the community, and for which the employee is financially responsible.

"3. Preventive medical and engineering activities.—(a.) Preplacement physical examinations sufficient in detail to allow recommendations for proper job placement from the standpoint of the physical and mental capacities of the appointee and the requirements of the job will be performed on all applicants, in accordance with existing War Department and Civil Service directives, and in collaboration with the personnel office of the installation.

"(b.) General public health measures include periodic physical examinations, immunization programs, health educational activities, and the maintenance of close liaison with safety and personnel programs will be effected when necessary and as directed by higher authority.

"(c.) Surveys and inspections of plant operations and general sanitation will be made as necessary to insure proper recommendations for control of occupational health hazards. At least one complete industrial hygiene engineering survey will be conducted in each installation yearly. The industrial medical department of the installation will be informed of new or changed production activities in order that an evaluation of such activities can be made from the standpoint of health hazards."

Detroit recently announced a decision to contribute to the payment of hospitalization protection for its workers, by paying half the cost.

Editorial Comment

THE PEOPLE'S BEST DEFENSE

Apropos to recent controversies regarding recognition of chiropractic sanatoria as hospitals, is an article in the April issue of *Hygeia* and condensed in the June *Reader's Digest.* It is entitled "Can Chiropractic Cure?" The tenets of the cult are discussed in terms the average layman can understand and their absurdity must be obvious to anyone who thinks them over. Perhaps the A.M.A. should use its great facilities for promulgation of scientific material and for public health education to place this article before every educational body in the country.

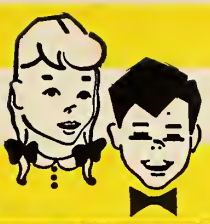
While we are exposing the evils of socialized medicine and antivivisection, why not give some attention to fraudulent system of healing? If the public is to be educated regarding some of the fundamentals of medical science, its requirements for further advancement and for unhampered application to human welfare, why not call attention to the pseudosciences and their ineffective if not dangerous implications. At present it would be timely to ask the cultists why it is that all at once the spinal segments are going awry and permitting poliomyelitis to make headway. We are frequently gratified in noting how tractable the layman is when told an obvious and reasonable truth.

Why does the medical profession wait until it is challenged before it rises to its own defense? Consistent, repeated, timely, plain and interesting healthful facts as part of public education and journalism would control the future Wagners, Falks, Hearsts, Dingells and all the little dangles at their incepiton."—Editorial, *Rocky Mountain Medical Journal,* July, 1946.

* * *

MEDICAL SERVICE TO LABOR

"The Improvement of Medical Service to Labor," is the title of an article by Ernest E. Irons, M.D., of Chicago, member of the Board of Trustees and Chairman of the Committee on Post War Medical Service. This article should be of special interest to any one who would discuss medical progress with any labor group, and reprints may be obtained by writing the American Medical Association.

IN A RECENT STUDY OF 512  CHILDREN *



Those receiving no medication showed an increase in the incidence of dental caries of 65 per cent. **65%**



Those receiving tablets of calcium fluoride alone showed an increase of 32 per cent. **32%**



Those receiving a combination of calcium fluoride with vitamins C and D ("ENZIFLUR" Tablets) showed an increase of only 15 per cent. **15%**

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*Strean, L. P., Beaudet, J. P.: New York State J. Med. *45*:2183 (Oct. 15) 1945.

POSTGRADUATE CONTINUATION COURSES

WAYNE UNIVERSITY COLLEGE OF MEDICINE ——— *Quarter beginning October 28, 1946*

These courses are open to all qualified persons. Veterans should make arrangements for tuition and books as provided by the GI Bill, with the Veteran's Counselor at the College of Medicine. Registration for these courses can be made in the office of Director of Graduate Medical Education at the College of Medicine after October 14.

	BACTERIOLOGY		
Parasitology	College of Medicine	Monday 8-12:00	$20.00
	ANATOMY		
Surgical Anatomy	College of Medicine (Limit 21)	Tuesday 2-5:00	$20.00
	PHYSIOLOGICAL CHEMISTRY		
Seminar	College of Medicine	Wednesday 4-5:00	$10.00
Special Topics	College of Medicine	Thursday 4-5:00	$10.00
	PHYSIOLOGY		
Blood	College of Medicine	T. & Th. 4-5:00	$20.00
	PHARMACOLOGY		
Seminar	College of Medicine	Friday 4-5:00	$10.00
	PATHOLOGY		
Pathology of Tuberculosis	College of Medicine	Friday 1-4:00	$20.00
Pathology of Neoplasms	College of Medicine (Limit 30)	Wednesday 1-4:00	$20.00
Hematology	College of Medicine	Monday 1-4:00	$20.00
Seminar	College of Medicine	2nd & 4th Monday 4-5:00	$10.00
	SURGERY		
Seminar	College of Medicine	Thursday 4-5:00	$10.00
	DERMATOLOGY		
Seminar	Receiving Hospital	Wednesday 10-11:30	$10.00
Conf. on Venereal Diseases	Social Hygiene Clinic	Thursday 3-4:30	$10.00
	RADIOLOGY		
Radiation Physics and Therapy	Harper Hospital	Oct. 31 6:30 p.m.	$10.00
Seminar Conference	Affiliated Hospitals	Monday 6:30	$10.00
	PSYCHIATRY		
Neurologic Conference	Wayne County Gen. Hosp.	Tuesday 10-11:00	$10.00
Clinical Psychiatric Conf.	Wayne County Gen. Hosp.	Wednesday 2:30-4:30	$10.00
Psychosomatic Conference	Receiving Hospital	Thursday 2-4:00	$10.00
	MEDICINE		
Medical Seminar	Wayne County Gen. Hosp.	Tuesday 4-5:00	$10.00
Medical Pathologic Conf.	(a) Receiving Hospital (Limit 20)	Friday 11-12:00	$10.00
	(b) Wayne County Gen. Hosp.	Thursday 11-12:00	$10.00
Diagnostic Conference	Wayne County Gen. Hosp.	Wednesday 4-5:00	$10.00
Therapeutic Conference Hematology Clinic	Receiving Hospital (Limit 15)	Thursday 11-12:00	$10.00
Gastroenterology Clinic	Receiving Hospital (Limit 20)	Wednesday 1-2:00	$10.00
Medical X-Ray Conference	(a) Receiving Hospital	Tuesday 11-12:00	$10.00
	(b) Wayne County Gen. Hosp.	Friday 1-2:00	$10.00
Electrocardiography	Wayne County Gen. Hosp.	Friday 11-12:00	$10.00
Electrocardiography	Receiving Hospital (Begins Oct. 2)	Wednesday 4:00	$25.00
	PROCTOLOGY		
Proctology	Begins at Receiving Hosp. Sept. 30 for 4 weeks (Limit 8)	8:00 a.m.	$30.00
	OPHTHALMOLOGY		
Basic Ophthalmology	Begins January 15, 1947		$100.00

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Case Reports of Dissecting Aneurysm

By Paul G. Henley, M.D.
and
Louis J. Gariepy, M.D.
Detroit, Michigan



Louis J. Gariepy

A dissecting aneurysm is a lesion produced by the hydrostatic force of the circulation blood which usually tears the intima of a vessel with subsequent extension of the effused blood in the media. The term "dissecting aneurysm" is not strictly correct, for an aneurysmal dilatation need not be present for the condition to exist. Neither is a tear in the intima necessary for the dissecting. Tyson[41] found no intimal tear in three of the five patients he examined. Also, this finding is corroborated by other observers in the literature.[25] Perhaps, a more correct designation would be a dissecting hematoma. The vessel usually involved is the aorta. However, a dissecting aneurysm can form in any artery.

The following case presentations are those of dissecting aneurysm of the thoracic aorta, proved at autopsy, which have been observed in Mount Carmel Mercy Hospital since 1939. The antemortem diagnosis is so infrequent that a review of these cases is justified.

Dr. Gariepy is Senior Surgeon and Chief of the Surgical Division and Dr. Henley is Senior Resident at Mount Carmel Mercy Hospital, Detroit, Michigan.

History

Descriptions of aneurysms have been recorded since 1542. Fernelius[6], being probably the earliest writer, is credited with having the opinion that aneurysms were due to a morbid distention of all the coats of an artery and that internal aneurysms resulted from the rupture of the internal coats of an artery with elevation and distention of the external coats by extravasated arterial blood. Vesalius[42] described a pulsating tumor which developed on a man's back near the spine after a fall from a horse. Nicholls spoke of intravascular pressure which would tear the internal coat and described experiments by which he produced tears of the internal coat of the pulmonary artery at the autopsy table. At a later date, he reported that a dissecting aneurysm of the aortic arch with a large transverse tear in the intima and rupture of the right ventricle was the cause of death of King George II.[27] King George was at stool at the time. Morgangi[24], however, was probably the first observer of the dissecting aneurysm.

Maunoir[20] was probably the first to give a clear description of dissecting aneurysm of the aorta and pulmonary artery unless the description given by Morgangi is accepted. The term dissecting aneurysm, though, was not applied to the lesion until 1819 when Laennec's[16] work appeared. In this he spoke of "aneurysms dissequant." From this time, there has appeared in the literature an increasing number of authentic cases of dissecting aneurysm of the aorta.

Shekelton[37] (1822) described cases of dissecting aneurysm in which circulation has been re-established through a second opening into the aortic lumen. Rokitansky[33] (1852) described eight cases, two of which were discarded later and discussed the probable causes. Probably, Swaine and Latham[40] were the first ones to recognize dissecting

aneurysms as a clinical entity. Peacock[29] in 1863 collected some eighty cases of dissecting aneurysm and submitted a careful discussion of the lesion.

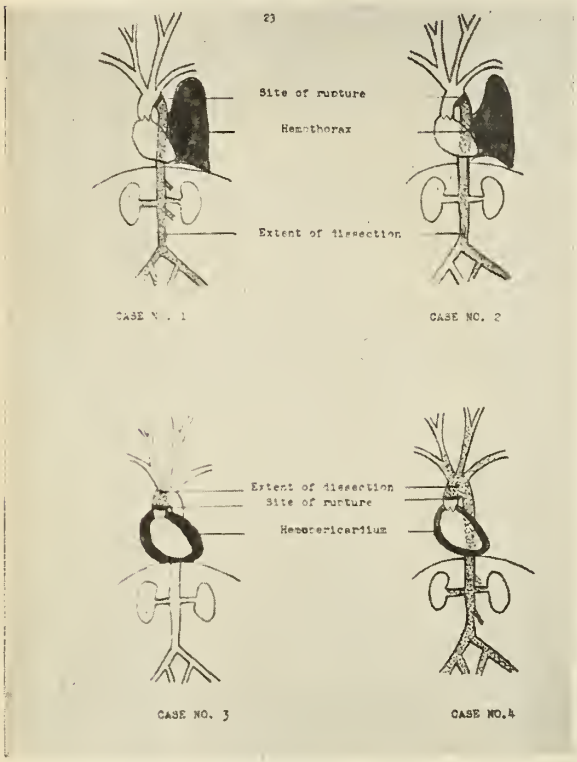


Diagram 1 .

Shennan's[38] excellent report on 300 cases discusses most of the aspects encountered in all varieties of dissecting aneurysms. In recent years the clinical aspects have been more elaborated. McGeachy and Paullin[21] reported six cases in which an antemortem diagnosis was made in three. Zimmerman[47] reported one case diagnosed antemortem. Schnitker and Bayer[35] reported one case of a twenty-two-year-old woman with pregnancy in which "it was concluded that we were dealing with an acute severe vascular accident, most likely a dissecting aneurysm." Kinney, et al[13], reported a case of coarctation of the aorta with a dissecting aneurysm in which the diagnosis was made antemortem. From the literature it is difficult to judge the exact number of cases reported, but the figure is approximately 525.

Incidence

The four cases reported represent the total number in 638 autopsies at Mount Carmel Mercy Hospital since 1939. Three of the cases occurred within the past six months. This gives an incidence of 0.62 per cent or one in 159 autopsies. These figures seem to be higher than those found elsewhere. Cincinnati General Hospital as reported by Sailer[34] gave an incidence of one in 464 cases. Cook County Hospital as reported by Flaxmann[7] was one in 745 cases. Apparently, the average incidence is approximately one in 400 postmortem examinations.

Sex and Age

Males are affected about twice as frequently as females but as Shennan[38] reported the incidence in different decades of life show somewhat of a different variation. Up to the seventh decade men predominate but in the eighth and ninth decades women predominate.

In two recent articles[13,35] young women twenty-two and twenty-three years of age, were victims of dissecting aneurysms associated with pregnancy. Boyd[2] states the "dissecting aneurysm is a disease of later life and is rare before the age of fifty." More recent reports will hardly bare out that it "is rare before the age of fifty." One of the cases reported here was thirty-seven. Five of the six cases reported by McGeachy and Paullin[21] were forty-one, forty, thirty-nine, thirty-two, and thirty years of age. Zimmerman[47] reported one of forty-seven years of age. Schnither and Bayer[35] reported one of twenty-two years of age. Kinney, et al[13] described one of twenty-three years of age and Flaxman[7] one of twenty-two years of age. Klatz and Simpson[14] described forty-two cases below the age of forty years. Wolff[45] described what might be interpreted as an early dissecting aneurysm in an infant twelve days of age, and Shennan[38] reported one of a woman nearly 100 years of age. Therefore, it may happen at any age provided the proper conditions are present. However, the majority occur between the ages of forty-five to sixty and in males.

Etiology

The causative agents of dissecting aneurysms are not known. There appear, however, to be two factors which seem to play the greatest roles. One of these, changes in the media, seems to be fairly well established but the cause of the change is not known. The other, hypertension, is less well established. Pennock[31] (1839) was probably the first to show that the media was the layer in which the dissection occurred. Since that time, numerous

theories as to the role played by the media have been brought forth. A loose-fitting quadrupe "idiopathic cystic medial necrosis" (Moore)[23] (Fig. 4) has been used for the degenerative changes noted in the media microscopically in many instances. From the literature one can find the following agents and more:

1. Developmental errors in the formation of the media. In these, there are associated vascular defects or coarctation of the aorta, etc. (Boyd and Werblow[3]).
2. MacCullum[19] postulated that intimal arterio-sclerosis plays a role.
3. Tyson[41] suggested intimal sclerosis of the vasa vasorum.
4. Hypertension by numerous investigators.
5. Mucoid accumulations in media with degenerative changes (Gobel[9] and Milew[22]).
6. Thyroid disease (Wegelin[44]).
7. Circulating toxins as in eclampsia (Krunkenburg[15]).
8. Repeated minimal traumatizations (Weise[43]).
9. Syphilis, the great imitator. Syphilitic changes are noted in about 10 per cent of the cases and this is the normal incidence generally.
10. Late effects of Rheumatic fever (Gray[10]).
11. Nicotine (Gsell[11]).
12. Diphtheria toxins (Duff[4]).
13. Epinephrine (Erb[5]).
14. Cholesterol (Leary and Weiss[17]).
15. Vitamin deficiency (Wolff[45]).
16. Trauma.

Perhaps all of the factors listed above play some role in causing a dissecting aneurysm but there are already too many contradictory and confusing ideas to attempt any sane solution at this time. This paper does not propose another nor support any idea as to the etiology.

Pathogenesis

There are two hypotheses given as to the events leading to the tear in the intima and further dissecting. The two have already been mentioned as increased intravascular pressure and damage to the layers of the aorta, particularly the media. Regardless of the pressure, these damaged aortic layers may rupture with dissection. Klatz and Simpson[14] found that the aorta was capable of withstanding pressure above 1000 mm. of mercury without rupture. It appears from the experimental data that increased intravascular pressure alone cannot cause actual dissection. Therefore, the arterial walls must be damaged in a dissecting aneurysm. There has been much discussion as to which layer is responsible, and at the present, the media appears to be holding the limelight. With all the cases reported, experimental and otherwise, there is definite lack of unanimity regarding the genesis and the changes within the structures to produce dissecting aneurysms. Further discussion on this subject here would be futile.

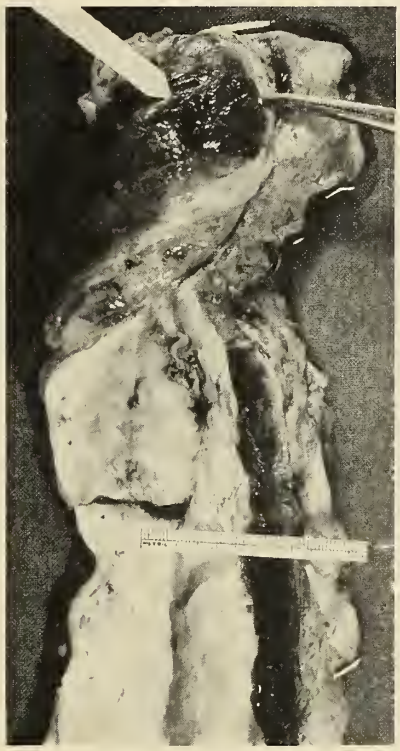


Fig. 1. Dissecting thoracic aorta aneurysm. The arrow indicates the point of perforation into the left thoracic cavity. Note the diffuse atheromatosis.

Clinicopathological Correlations

The clinical picture is well presented by Moore.[23]

"The immediate result of the rupture of the aorta is the production of intense, agonizing pain beneath the sternum. This pain may radiate to the back, into the neck or into the abdomen. Pain in the extremities is usually interpreted as extension of the dissection into the sub-clavian or into the iliac and femoral arteries. This pain is frequently followed by collapse with vomiting, dyspnea and loss of consciousness. Within a few hours there is usually recovery and the signs and symptoms are then caused by the mass of blood within the aortic wall or by obstruction of the branches of the aorta. The dissection may proceed to the base of the heart and partially occlude the coronary arteries to produce characteristic electrocardiographic changes. Dissection into the arteries of the extremities may interfere with circulation so that the extremities become cool and the pulse cannot be felt. Dissection into the carotid arteries may lead to blindness or hemiplegia. Rupture of the smaller

intercostals and lumbar branches of the aorta leads to relative ischemia of the spinal cord and paralysis."

To this may be added, rupture into the pleural cavities producing complete collapse of the lung with a shift of the mediastinum and its sequelae, rupture into the retro-peritoneal region around the kidney resulting in anuria and rupture into the root of the mesentery producing a picture of mesenteric thrombosis, et cetera. From such a bizarre of possibilities it is easy to see that the diagnosis is difficult. From the records available, it appears that the diagnosis is usually made by the pathologist. The number of cases in which antemortem diagnoses were made is increasing. The percentage now is approximately 8 per cent.

Coronary occlusion appears to be the diagnosis with which it is most often confused. Shaw and French[36] proposed the following table as an aid in differential diagnosis:

Symptoms and Findings	*Dissecting Aneurysm*	*Coronary Occlusion*
Pain	Sudden, Tearing terrific	Oppression developed slowly
Occurrence	Exertion presedes	May come at rest
Location pain	High in chest behind sternum or in abdomen	Fairly low in chest
Radiation pain	To spine	To neck and arm
Pericardial friction rub	Absent	May appear in few hours
X-ray findings	Mediastinal mass	Normal Mediastinum
Heart	Usually enlarged	May be normal size
EKG	Inconstant changes	Characteristic
Circulatory block of an extremity	Common but transient	Uncommon, embolic, permanent
CNS	Paralysis frequent	Absent
Pleural effusion	Fairly frequent	Very rare
Vasodilator drugs	No effect	May relieve

Two additional aids are an increased icteric index from bilirubin formation and the fact that 75 per cent of the cases die within the first twenty-four hours.

Probably the most important points in differentiating this condition from coronary thrombosis is the radiation of the pain and the absence of characteristic EKG changes.

If one sees the case later and the spreading signs and symptoms are then predominate, the diagnosis may be made from the immediate signs and symptoms, forgetting those of a few hours previous. This happened in one of the cases reported here. The signs and symptoms were directed towards the abdomen producing a clinical picture of intestinal obstruction or "acute abdomen." The patient was subjected to a laparotomy. In addition, this case was the only one in which the possibility of a dissecting aneurysm was considered in the differential diagnosis.

The duration of the symptoms was from twelve hours to five days before death. A complete history with close observation and EKG findings appear to be the only possible means at present to make an antemortem diagnosis.

Site of Rupture

The initial tear is usually located in the first 3 cm. of the ascending aorta. However, the site is determined by the location and extent of the medial disease. The usual three divisions of the aorta are involved approximately as follows:

1. Ascending aorta 71 per cent.
2. Transverse arch 21 per cent.
3. Descending aorta 8 per cent.

The rupture is usually transverse. It is thought that since the tear is across the aorta it indicates that the force needed to tear the intima is the systolic force of the heart. Rindfleish[32], Loffler[18], and Oppenheim[28] have given an explanation as to the frequent involvement of the ascending aorta. It involves the pulmonary artery and thickened bands, recoil of the aorta during diastole, and bursting tension of a vessel in direct proportion to its radius, respectively. As can be noted, there is no unanimity of opinion as to the frequency of involvement of the ascending arch. It might well be passed by at the present by stating that since this portion of the aorta is in close proximity to the beginning force, it is most likely to be the one most often affected. The next most frequent site is near the origin of the left subclavian artery. In this report these sites were involved in two cases each (see Diagram I).

Extent of Dissection

In our four cases, diagrams are given to show the extent of dissection of the various arteries (see Diagram I). The ultimate extent of dissection depends upon several factors. If the process ends abruptly the dissection usually is not very extensive. If the dissection produces cardiac tamponade, as in

Case 3, or complete coronary occlusion, it will probably be limited. In other instances, the extension may be widespread and involve the finer ramifications. The direction of dissection from the tear may be proximal 15 per cent and distal 95 per cent or both. Sailer[34] states "that in a large dissection the extension of the hematoma within the aortic coats proceeds almost entirely in a centrifugal direction propelled by and following the column of circulating blood within the vessel's lumen. Occasionally, however, the blood has been described as dissecting in a centripetal direction." The larger branches of the aorta, as renal arteries (Blaine III[1]), carotid arteries, subclavian arteries, abdominal aorta, common iliac and other branches may be involved. In one case I observed as a medical student, the dissection extended to the popliteal arteries.



Fig. 2. Serial cross-sections of Figure 1 show the medial dissection and varying size of the hematoma. Note the adjacent esophagus.

Histopathology

The microscopic findings of the layers of the aorta, especially the media, are variable. This is probably due to different investigators describing the same process or different stages of the same process. At any rate, the changes are of degenerative nature usually on a non-inflammatory basis. As far as can be determined, no dissecting aneurysm has been described in which there was healthy appearing media, adventitia and intima. It is true, too, that one or more of these layers of that aorta involved in a dissecting aneurysm are not exactly like a young adult's aortic layers at any time. The finding of non-exudative medial changes (Weisel[48]) changes in the elastica intima (Storek and Epstein[39]) and cyst-like formation in the media in other diseases (Freedman[8]) makes one wonder if most of us, as we grow into our fourth and fifth decades, do not have a certain degree of histopathological changes in the aorta. It is probably safe, however, to say that the evidence points to changes in the layers which are consistently found in cases of dissecting aneurysms. Probably, the loss of the elastic tissue (Wolff[46] and Weise[43]) is the most striking of all medial changes when one considers the function of elastic tissue.

Prognosis

Most cases (75 per cent) of dissecting aneurysms die within twenty-four hours of the onset. The four cases reported here lived 120, twelve, twenty-four, and forty-eight hours, respectively. The duration of the condition apparently depends upon the velocity of dissection and sites involved. A second perforation of the intima may possibly re-establish circulation by organization and re-canalization with the formation of a "double aorta." Peery[30] found such a condition in some eighty cases already reported. There was no such condition found in the four cases reported here. Hall[12] reports a case in a youth of seventeen years who lived to be thirty-two years of age and performed athletic exercises. If the dissecting hematoma perforated the adventitia, then any number of changes of events may result, including cardiac tamponade,

hemothorax, et cetera. This perforation may occur opposite the initial tear or distal to it. It is easy to conceive the numerous possibilities leading to death or healed aneurysms from such an episode.

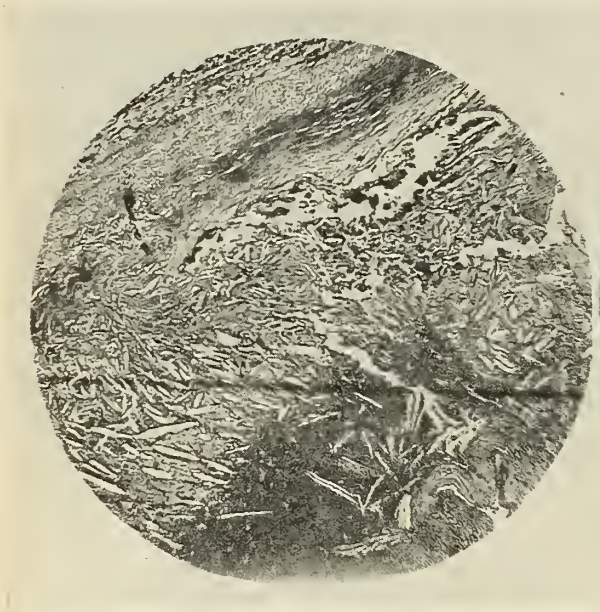


Fig. 3. Atheromatous placques of aorta containing numerous cholesterol clefts.

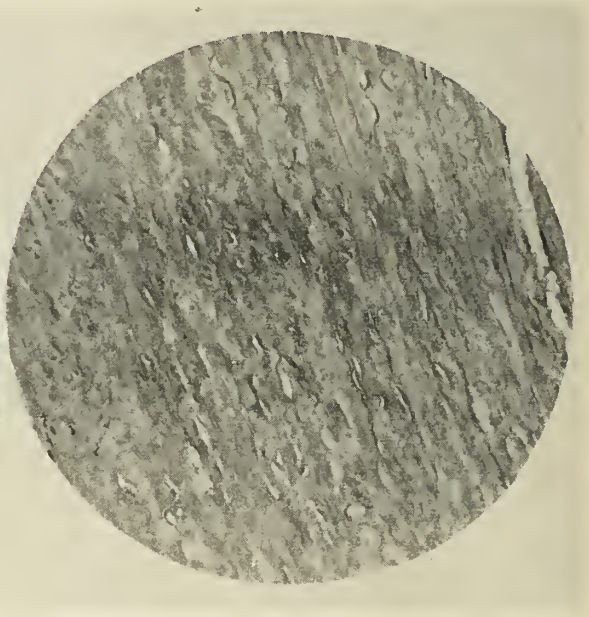


Fig. 4. Idiopathic cystic medial necrosis of the aorta.

Report of Cases

Case 1.—L. Q., a fifty-three-year-old white man, was admitted to another hospital September 14, 1945, 7:45 p.m. The chief complaints were severe pains in chest anteriorly and bilaterally and along both costal margins, accompanied by severe dyspnea and shortness of breath. One hour previous to admission, the patient was working in his feed store where he had moved a sack of feed. Ten minutes after the exertion, he experienced a severe pain in the chest, substernally. Very shortly, this pain spread to both costal margins, into the right upper quadrant and into the regions of the lateral chests. The pain became constant, and he then became dyspneic and short of breath. He complained of something choking him. The police were called and a pulmotor was used to assist the patient in his breathing. He improved to the extent that he walked into the hospital. In addition, the patient was a known hypertensive.

The past history disclosed that he was given a full course of antiluetic therapy fifteen years ago. The patient was diagnosed as having a cerebrovascular accident with hyporeflexia and hypo-aesthesia on March 6, 1944, but he would not remain in the hospital for further studies.

Physical examination on admission revealed the following: Blood pressure 190/115; pulse 80 per minute; respiration 28 per minute. The patient was in respiratory distress but not cyanotic. The pupils were round, equal, and reacted to both light and accommodation. Fundoscopic examination revealed 3 plus hypertensive sclerotic vascular changes but no hemorrhage nor exudate. A few moist râles were found in both lung bases. The heart was enlarged to the midaxillary line with the point of maximum impulse in the left 6th intercostal space in the midaxillary line. A soft systolic murmur was heard at the apex and aortic area. All of the palpable arteries pulsated strongly. The brachial arteries were tortuous. There was no tenderness nor masses in the abdomen. All reflexes were slightly diminished. The right arm had approximately 75 per cent strength of the left. The sensations were intact throughout.

A diagnosis of coronary occlusion, left ventricular heart failure and luetic aortitis was made. The serology was positive. The patient progressed satisfactorily with oxygen, aminophylline and morphine. On September 17, 1945, the blood pressure was 205/130 and the patient felt much better. He was using nasal oxygen intermittently. On September 18, 1945, the patient showed continued general improvement. The marked tenderness in right upper quadrant was still present and the liver appeared now to be enlarged. There was fluid in the left pleural cavity. On September 19, 1945, the paticnt was transferred to Mount Carmel Mercy Hospital. An electrocardiogram was taken which showed a regular rhythm and left ventricular strain with positive evidence of myocardial damage. The patient became much worse and expired ten hours after admission.

Postmortem examination revealed large retroperitoneal hemorrhages along the base of the mesenteric arteries and abdominal aorta. The left pleural cavity

was completely filled with a mass of blood clots and approximately 400 c.c. of fluid blood. There was extensive hemorrhage along the thoracic aorta and left parietal pleura. Just below the opening of the left subclavian artery, there was a transverse tear in the intima of the aorta which extended through the left pleura into the thoracic cavity. This rent measured 1.5 cm. in length and through it dark blood could be expressed by pressure on the aorta. The right pleural cavity contained no signs of hemorrhage. The heart weighed 620 grams. The greatest transverse diameter was 15 cm. The enlargement was due primarily to a marked hypertrophy of the left ventricle which was 4 cm. in thickness immediately below the mitral valve. The valves showed no significant changes. The entire aorta was the site of numerous yellowish-gray atheromatous plaques, many of which were calcified. These changes were most numerous in the ascending and lower abdominal segments. In addition, there appeared to be an ill-defined longitudinal wrinkling of the aortic wall in the first 4 cm. of the ascending segment, bearing a remote resemblance to that seen in syphilitic aortitis. Further examination of the tear showed it to be irregular in outline. The opening was surrounded by freshly clotted blood. From this tear in the wall, a typical dissecting aneurysm could be followed downward to the femoral arteries on either side (see Diagram I). Fresh blood was noted in the wall. The inner tube was formed by the intima and the larger portion of the media. The space between the outer and inner tube was filled with partially clotted blood and was traversed by bridge-like trabeculae, some of which were intercostal arteries. Similar dissection was noted in the renal and mesenteric arteries. The dissection did not involve the three major arteries of the arch of the aorta.

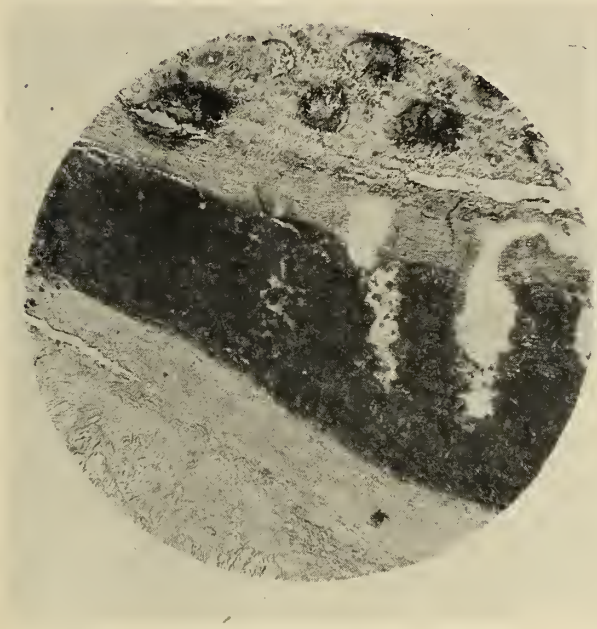


Fig. 5. Aorta shows hemorrhagic dissection of media.



Fig. 6. Dissection of renal artery.

Microscopic examination revealed marked intimal arteriosclerosis of the aorta and questionable syphilitic aortitis. Sections through the aorta showed large subintimal deposits of cholesterol and fatty substances, some of which were undergoing calcification. There was associated fibrosis of the luminal layers of the intima. In some sections there was actual necrosis of the media associated with leukocytic infiltration. There was a true separation of the media by fresh and organizing blood, indicating a dissecting type of aneurysm. The adventitial layers were thickened by new granulation tissue infiltrated by inflammatory cells, chiefly lymphocytes and plasma cells in a perivascular arrangement. No areas of a gummatous necrosis were noted. Special silver stains failed to reveal spirocheta pallida. Microscopic studies of the heart revealed marked parenchymatous degeneration with irregular hypertrophy of the remaining viable fibers. There were patchy areas of myxomatous interstitial tissue and edema of the myocardium. The coronary arteries showed marked sclerosis with adventitial thickening and perivascular lymphocytic and plasma cell infiltration. In the kidneys there was noted hyaline thickening of the small arteries up to and including the afferent glomerular arterioles. There were medial and intimal hyaline charges which markedly reduced the size of the lumens. The glomeruli were relatively acellular and showed increased lobulations. The glomerular basement membrane was thickened. Except for an occasional calcium deposit in the loops of Henle, the tubular portions of the nephrons were negative. A few scattered leukocytes were noted in the interstitial tissue. The final diagnoses were:

1. Dissecting aneurysm of descending, thoracic and abdominal aorta and associated major branches.
2. Advanced atheromatosis of the aorta.

3. Degeneration and necrosis of the media of the aorta.
4. Questionable syphilitis aortitis.
5. Marked eccentric cardiac hypertrophy.
6. Ischemic myocardial degeneration.
7. Slight atheromatous changes in the mitral and aortic valves.
8. Marked coronary sclerosis.
9. Left massive hemothorax.
10. Bilateral partial upper lobe atelectasis.
11. Slight pulmonary edema.
12. Chronic fibrous pleuritis.
13. Advanced arteriolar and arterial nephrosclerosis.
14. Multiple retro-peritoneal hemorrhage and retro-pleural hemorrhage.
15. Acute passive congestion of the spleen.

Case 2.—A fifty-year-old white man, welder by occupation, was admitted on November 7, 1942, at 8:15 a.m. to Mount Carmel Mercy Hospital complaining of a sudden onset of excruciating pain in the back, chest, and lower extremities, with a duration of seven to eight hours. There was some vomiting during the night. He had had some bloody diarrhea during the past month. His blood pressure, rapid pulse, respirations and clammy skin were indicative of shock. Head, neck, chest, and abdomen were essentially negative, except that the heart was enlarged. At 11:15 a.m. he complained of severe pains in chest and left leg. Respirations were short, irregular, and a slight cyanosis was evident. He expired suddenly at 11:38 a.m. within three hours after admission.

From relatives and the family doctor, it was learned that he was admitted elsewhere on June 16, 1941, with the complaint of headaches for the past ten years. The headaches occurred almost monthly, persisting for one or two days. He complained of tinnitus on occasions. Physical examination at this time revealed a pulse of 82, temperature 99° C., respirations 18 and blood pressure of 232/162. The left border of cardiac dullness was 11.5 cm. to the left mediastinal line and a soft systolic murmur was heard at the apex. The liver and spleen were just polpable. The examination of the fundi revealed hypertensive retinitis grade III. The blood Kahn reaction was negative; urinalysis negative; blood count normal; blood NPN 31.2 mgms. The EKG was of normal type. Ortho-diagrams revealed normal sized heart with moderate tortuosity of the aorta. Intravenous pyelograms were normal. After administration of postassium sulfocyanate the blood pressure was reduced to 160/110.

Laboratory finding on last admission revealed 2 plus albumin, 2 plus sugar in the urine, red blood count 4,350,000, white cell count 23,500, and hemoglobin 13.8 gms.

Autopsy revealed that the left pleural cavity contained 1,250 c.c. of fresh bloody fluid and the pericardial sac 100 c.c. of similar fluid around the aorta as it arose from the heart; extending along the aorta down to the diaphragm and also for a short distance up along the great vessels of the neck, there was a massive peri-aortic hemorrhage. Also, it extended for a short distance along the root of the pulmonary vessels.

In the arch of the aorta, just beyond the origin of the left sub-clavian vessels, there was a transverse slit in the superior portion of the intima of the aorta over which was a small clot of blood. This slit communicated with a space in the media of the aorta which formed a dissecting aneurysm extending from this region through the entire length of the thoracic and abdominal aortas and for a short distance in the left iliac arteries (see Diagram I). At the time of the autopsy, this space was empty of blood. At a distance of 8 cm. distally, from the tear in the intima, there was a transverse external opening posteriorly and slightly to the left from which the blood had escaped into the peri-aortic tissues. In the posterior and superior portions of the left thoracic cage under the second and third ribs, the blood dissected under the pleura and formed a large bleb which was filled with fluid blood. It was from this region that the massive hemorrhage into the left pleural cavity originated. The heart weighed 350 grams. The valves and endocardium appeared normal and the coronary vessels showed moderate patchy sclerosis. There was hypertrophy of the muscle of the left ventricle. Sections of the myocardium revealed no evidence of infarction or scarring. Both kidneys had only a few fairly large scarred areas visible on the external surface and microscopic revealed arteriolar-sclerosis and arteriosclerosis. The final diagnoses were:

1. Dissecting aneurysm of thoracic and abdominal aorta with rupture into left pleural cavity.
2. Massive left hemothorax.
3. Atelectasis of left lower lobe of lung.
4. Hypertrophy of left ventricle (hypertension).
5. Renal arteriolarsclerosis and arteriosclerosis.
6. Pancreatic arteriosclerosis.
7. Rectal polyp; no malignancy.

Case 3.—C. M., a white man, aged fifty-three years, a machinist by occupation, entered the hospital January 1, 1946, complaining of a severe choking, vicelike pain in the anterior chest radiating down left arm, lasting from six to eight hours. The patient stated that he had a similar attack some three months before. He also had had shortness of breath and a slight nonproductive cough for the past two months. His wife stated that about four years before, the patient developed a pain in his chest while mowing the lawn. This pain subsided with rest. He was told at that time his blood pressure was "very high." It was also learned that six days prior to admission, after retiring for the day, he was suddenly seized by a severe vicelike choking pain in the anterior chest just beneath the sternum. This pain radiated to the left shoulder and down the left arm. The pain persisted throughout the night. This episode left the patient weak and fatigued with some residual pain and soreness of the chest. The past history included no other pertinent data.

Physical examination revealed a pale, weak, freely perspiring acutely ill patient. There were moist rales in both lung bases. Heart was enlarged to the left and

downward; the sounds were regular and fairly good quality. The blood pressure varied from 120/80 to 100/70. The liver was slightly enlarged. The skin was cold and clammy.

The laboratory data showed RBC 4,270,000: WBC 10,100 with a normal differential; positive Kahn and an

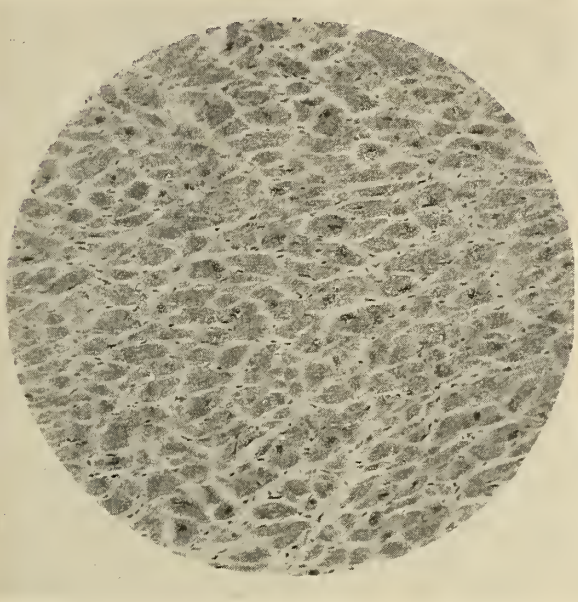


Fig. 7. Cardiac muscle shows evidence of hypertrophy.

essentially negative x-ray of chest. Electrocardiograms could not be taken.

A diagnosis of coronary occlusion was made. The patient gradually lost ground under treatment and expired approximately eighteen hours after admission.

Postmortem examination revealed that the right pleural cavity contained approximately 200 c.c. of blood-tinged fluid. The pericardial sac was completely filled and dilated with a blood clot. This clot was 2 cm. in thickness and completely surrounded the heart. Blood had extravasated into the tissues surrounding the heart including the diaphragm. The heart weighed 650 grams. The enlargement was due primarily to hypertrophy of the left ventricle, the wall of the left ventricle being 2.5 cm. in thickness just below the mitral valve. The papillary muscles were hypertrophied. There was no gross evidence of syphilitic aortitis. The coronary ostia were slightly deformed due to atheromatous placques. There was an accessory coronary artery with its ostia 2 mm. lateral to the ostia of the right coronary vessel. There were scattered yellowish-gray placques throughout the coronary arteries. There were no signs of complete occlusion. However, the lumen on the larger branches of the coronaries was markedly compressed. There was a transverse tear in the intima of the ascending aorta about 2 cm. above the left posterior aortic valve. This tear was irregular and was about 2 cm. in length. The intima of the entire aorta was the site of numerous grayish-yellow atheromatous placques. From the tear there was a typical dissecting aneurysm which had divided the media up to the point of origin of the innominate artery (see Diagram I). In addition, there was a 1 cm. tear in the parietal layer of the pericardium opposite the appendage of the left auricle.

Microscopic examination revealed advanced median necrosis of the aorta with dissection of the media by

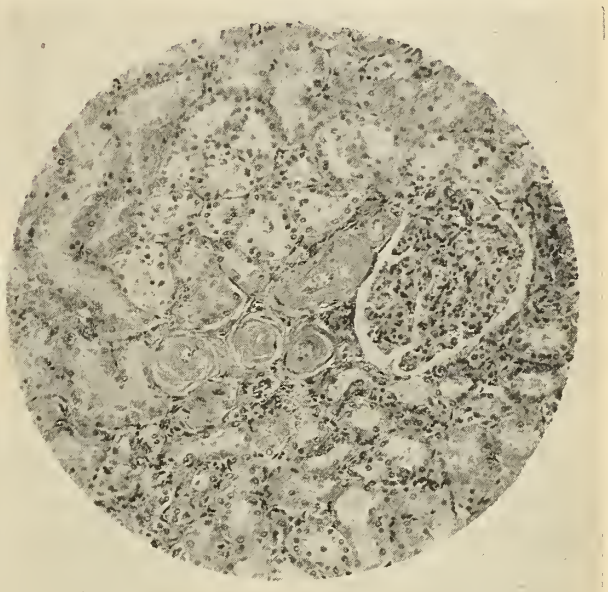


Fig. 8. Arteriolar nephrosclerosis.

fresh blood. Also, there was moderate atheromatosis of the intima and chronic inflammation and fibrosis of the adventitia, which may have indicated a probable previous dissection followed by repair. There was no evidence of syphilis. The heart showed moderate parenchymatous degeneration with a loss of the nuclear detail. There was also slight chronic proliferative pericarditis. The coronary arteries showed advanced coronary sclerosis with calcification. The final diagnoses were:

1. Dissecting aneurysm of the aorta with perforation into the pericardial sac and dissection of the ascending aortic segment.
2. Advanced atheromatosis of the aorta.
3. Advanced median necrosis and chronic inflammation and fibrosis of the adventitia of the aorta.
4. Marked cardiac hypertrophy—chiefly of the left ventricle with moderate parenchymatous degeneration.
5. Slight thickening of the tricuspid and aortic valves.
6. Marked coronary sclerosis.
7. Right accessory coronary artery.
8. Slight bilateral hydrothorax.
9. Healed apical tuberculosis.
10. Patchy atelectasis.
11. Chronic fibrous pleuritis.
12. Embolus in small sized pulmonary artery.
13. Passive pulmonary congestion.
14. Moderate arterial nephrosclerosis with multiple cortical cysts.

Case 4.—N. K., a thirty-seven-year-old white male, entered Mount Carmel Mercy Hospital January 28, 1946, 6:00 p.m., complaining of severe abdominal pain. On questioning it was learned that in the morning of January 27, 1946, after a night of drinking, he was awakened by a severe pain in the chest about the level of the manubrium which gradually migrated to the epigastrium. This was relieved by his family doctor by intravenous and subcutaneous morphine. Later in the day the patient was up and about. That night he began to complain of generalized abdominal pain and discomfort in the costal regions. He could not void and was catheterized, which afforded some relief. Early in the morning of January 28, 1946, the abdominal pain again became very severe, particularly on the left side in the kidney region. When admitted there was severe pain in the right groin. There had been no vomiting nor disturbance in bowel function. The past history was essentially negative except for the fact that he had been a heavy drinker. There was no knowledge of hypertension. The patient had a negative serology six months prior to admission. Physical examination revealed an exsanguinated male with above complaints. The blood pressure was 40/?; pulse was imperceptible. Heart tones were faint but regular. Heart was not enlarged. The chest was clear at this time. The abdomen was slightly distended; marked tenderness without rigidity in all quadrants. There were varicosities and old ulcers on legs.

Laboratory data showed RBC 2,610,000; Hb. 55 per cent; WBC 27,350; stab cells 20, seg cells 64, and lymph cells 16. The urine was essentially negative. The electrocardiogram was interpreted as sinus tachycardia, left axis diviation. There were no changes compatible with coronary thrombosis. The blood amylase and lipase were normal.

A clinical diagnosis of acute pancreatitis was suspected. The patient was given a total of 2,500 c.c. blood with other symptomic therapy but showed no improvement. The patient was taken to surgery at 9:00 p.m., on January 28, 1946, and under local anesthesia an incision was made in the right upper quadrant and large retroperitoneal hematomas were found. The patient again developed severe shock, and with therapy the blood pressure rose to 74/52. He rallied clinically. Ten hours later he became weak; the pulse became rapid; blood pressure was 60/40; lung fields contained râles; both sides of the chest were dull to percussion. He expired shortly.

Postmortem examination revealed massive retroperitoneal blood clots around both kidneys, into inguinal regions and in the region of the superior mesenteric artery. The root of the mesentery was markedly extravasated with blood. There was approximately 200 c.c. serosanguinous fluid in the peritoneal cavity. The pleural cavities each contained approximately 800 c.c. of blood-tinged fiuid. The heart appeared to be moderately enlarged. There was approximately 175 c.c. of bloody fluid in the pericardial sac. A 2 mm. perforation into the parietal pericardium was noted opposite the ear of the left muscle. The entire mediastinum was markedly extravasated with blood. The heart weighed 560 grams. Its greatest transverse diameter was 15 cm. The visceral pericardium was partially covered by freshly clotted blood. Both the anterior and posterior aspects of the right auricle and ventricle and left auricle contained large zones of recent bright red hemorrhagic extravasations beneath the visceral pericardium. There was a 1.5 cm. transverse tear in the posterior wall of the aorta 2 cm. above the aortic orifice. Apparently, the perforation extended into the pericardial sac resulting in the above-noted hemopericardium. The myocardium of the left ventricle was 2.5 cm. in thickness just below the mitral valve. There were rough calcified nodules measuring 8 mm. in diameter on the Corpora Arantii of the aortic valves. There were yellowish-gray atheromatous placques on the ventricular surfaces of the mitral valve. Grayish-yellow placques were found over the entire intima of the ascending aorta. There was complete dissection of the entire thoracic aorta from the site of the intimal tear mentioned above. This resulted in the production of one tube within a tube which were separated from each other by a small amount of blood. The dissection extended into the three great vessels of the aortic arch. The abdominal aorta was likewise dissected. The dissection had extended into the mesenteric, renal and iliac arteries (see Diagram I). The only prominent finding was the enlargement of the liver which weighed 2,200 grams.

Microscopic examination revealed idiopathic median necrosis and hemorrhagic extravasation in the media and adentitia of the aorta. There were atherosclerotic changes noted in the intima of the aorta. The heart showed moderate parenchymatous degeneration, coronary sclerosis, and sub-epicardial hemorrhagic extravasation. There was patchy, atelectasis, bronchopneumonia and congestion along with collections of heart failure cells in the pulmonary tissue. The liver showed advanced fatty degeneration. There was slight arterial nephrosclerosis and dissection of the renal arteries. The final diagnosis included:

1. Dissecting aneurysms of the aorta extending into the greater branches.
2. Atheromatosis and median degeneration of the aorta.
3. Partial hemo-pericardium.
4. Cardiac hypertrophy and parenchymatous degeneration.
5. Moderate coronary sclerosis.
6. Bilateral sero-hemorrhagic hydrothorax.
7. Bilateral pleural adhesions.
8. "Nutmeg" liver.
9. Slight nephrosclerosis.

Summary

1. Shock was present in all cases varying in degrees depending upon the extent of dissection.

2. Response of shock to treatment is an important diagnostic point; most upper abdominal pains causing shock respond more readily to shock treatment than dissecting aneurysm.

3. We believe that if a greater percentage of autopsies are performed in hospitals that the percentage of the incidence in dissecting aneurysms will increase perceptibly.

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MSMS

Little Joe Genius Says—

I see where the Doctors of Medicine in Michigan are not grafters. The VA authorized 31,062 treatments to veterans with service connected disability up to September 1, 1946. Only 20,539 were rendered and 10,521 were cancelled. The percentage of use was 66.13 per cent.

The Treatment of Subacute Bacterial Endocarditis with Penicillin--with Emphasis on Present-Day Conclusions

A Case Report of the Disease Successfully Arrested by Massive Doses of Penicillin

By Henry L. Smith, M.D., F.A.C.P. and
Edward W. Ebinger, M.D.
Detroit, Michigan

IT GIVES HEART to the medical profession to witness a revolution in the progress of an ailment formerly fatal. Within the past two years such a revolution has occurred in the treatment of subacute bacterial endocarditis with penicillin. This has transformed a previously fatal malady into one with good prognosis.

Fleming, in his original studies on the antibacterial action of cultures of his strain of penicillin, included some strains of streptococcus viridans which he found to be variably susceptible. From that quiet beginning has grown a shining new step in the progress of medicine.

The purpose of this paper is to summarize briefly some of the recent conclusions concerning the treatment of subacute bacterial endocarditis successfully treated with penicillin.

It is not the intent of the writers to describe all previous treatments of subacute bacterial endocarditis before penicillin. This interesting and humiliating story should be mentioned, however, to recall the variety of bizarre and fanciful methods of treatment that were attempted. The story of the treatment of subacute bacterial endocarditis can be divided into three periods.

During the first period, 1913 to 1937, termed the "pre-sulfonamide era," a great many therapeutic procedures were carried out. A few can be mentioned: polyvalent anti-streptococcus serum; splenectomy; human iso-immune transfusions and serum; gold therapy; searing of the pectoral muscle after resection of the breast; the use of various chemicals (neosalvarsan, gention violet, acriflavin); fever therapy, and heparin. All were unsucessful.

Dr. Smith is Chief of Staff and Dr. Ebinger is an intern at Mount Carmel Mercy Hospital, Detroit, Michigan.

The second period, 1937-1944, called the "sulfonamide era," saw various chemotherapeutic agents of this nature employed. Sulfonamide therapy constituted a tremendous advance in the management of this disease by demonstrating for the first time that bacterial endocarditis could be cured, but its usefulness proved to be disappointingly limited. The various sulfonamide derivatives had little or no effect on cases of acute bacterial endocarditis, and less than five per cent of patients with the subacute form of the disease were permanently benefited by their administration. It was repeatedly shown that the sulfonamide compounds were at times capable of causing the destruction of the micro-organism in the peripheral blood, and that blood cultures remained sterile for weeks only to have the bacteremia return with renewed vigor. Despite the fact that sulfa drugs exhibited a transient antipyretic effect, the almost universal failure of chemotherapy rested fundamentally on the failure of the drugs to reach and destroy the organisms in the cardiac vegetations.[12] Thus, it soon became clear that an even more effective chemotherapeutic agent was needed. Surgical treatment, although sometimes successful in patients in whom infection is superimposed on a patent ductus arteriosus, unfortunately offered nothing to the majority of patients with bacterial endocarditis.

It was in the latter part of 1943 and early 1944 that the "penicillin era" was born. This drug which was soon to become the most effective agent known in the treatment of this disease, was not received with acclaim.

As far back as 1942, Goerner, Geiger, and Blake[5] treated four cases of subacute bacterial endocarditis with small doses of penicillin. Total dosages of 240,000 to 1,800,000 units were given in small doses intermittently every four hours. All died. The National Research Council, in 1943, reported disappointing results in seventeen cases in which penicillin had been used in dosages ranging from 240,000 to 1,760,000 units over a period of nine to twenty-six days.[10] Herell[7] reported a failure of penicillin to cure a case in which 128,000 units of penicillin were given over a period of six days. He observed the reappearance of streptococcus viridans in the blood four to six hours after administration of the penicillin was discontinued, and concluded that although penicillin temporarily freed the blood of organisms, the persistant foci on the heart valves precluded the usefulness of the drug.

These disappointing conclusions failed to halt other investigators. Soon penicillin became more easily obtainable. A greater number of cases of subacute bacterial endocarditis were treated. Larger doses of penicillin were administered. New methods of giving the drug in order to maintain constant blood level were investigated. The sensitivity of the infecting organisms to penicillin *in vitro* were correlated with the penicillin blood levels; therapeutic relationships were established. Increasing numbers of cases of bacterial endocarditis successfully treated were reported in the literature. Out of the massive accumulation of data grew this conclusion: Penicillin can cure subacute bacterial endocarditis.

There exists much variation of opinion among present-day investigators regarding the technique of penicillin therapy of subacute bacterial endocarditis. How much penicillin should be given each day, by what mode of administration, over how long a period of time, and what should be the total dosage of penicillin? These are a few of the problems that await complete clarification.

Strain sensitivity of the organism has been utilized as one criterion by which the dosage of penicillin may be determined. Goerner, Geiger, and Blake[5] treated twelve cases of subacute endocarditis in 1944. In their series the patients were given penicillin by continuous intravenous drip in amounts adjusted so that the serum penicillin concentration was at least three times that of the amount of penicillin which inhibited the organisms *in vitro*. By this criterion the total daily dosages ranged from 200,000 to 600,000 units per day for a period of three to nine weeks. All cases received over 5,000,000 units of penicillin. Eleven out of the twelve patients were cured.

Dawson and Hunter[3] attempted to maintain serum penicillin levels of at least four times the amount required to inhibit growth of the organism *in vitro*. Other investigators recommend that blood penicillin levels be five times the amount of penicillin per cubic centimeter that will inhibit the organisms *in vitro*.

Bloomfield and Halpern[1] state that if more than 0.1 units of penicillin per cubic centimeter is required to inhibit a particular strain, the organism should be regarded as relatively insensitive and "standard" treatment may not be effective. Extremely large doses of penicillin may be necessary to accomplish a cure.

If no laboratory facilities are available for testing the sensitivity of the organisms for penicillin, Dawson and Hunter[3] recommend giving 500,000 units of penicillin per day for two to three weeks. If blood cultures remain positive, sensitivity tests should be determined at all costs to avoid further waste of time and large amounts of penicillin.

These variations in susceptibility of different strains of streptococcus viridans to penicillin are important factors in failures of penicillin. It becomes evident that sensitivity tests are essential to the intelligent treatment of these cases.

To date, little inquiry has been made into methods for achieving higher penicillin blood levels by means other than increasing the penicillin dosage. Loewe, Rosenblatt, and Werber believe the use of amino hippuric acid[8] holds promise in this field of endeavor, and that it may alter the present day standards of penicillin dosage in treatment of subacute bacterial endocarditis.

It is interesting to note that somewhat smaller doses of penicillin are needed to maintain adequate blood concentration while patients are in congestive failure and on a limited fluid intake.[9] On the other hand, patients with free aortic regurgitation may require larger amounts of penicillin to maintain adequate blood levels.[4]

It is well recognized that relapses of infection occur far too numerously. The majority occur within two weeks following the termination of treatment.[3] Bloomfield and Halpern[1] estimate that recurrences of subacute bacterial endocarditis have taken place in from one fourth to one half of cases treated by penicillin, in spite of apparently adequate daily dosage which maintained penicillin blood levels safely above the strain sensitivity *in vitro*. Dawson and Hunter[3] cite a case of subacute bacterial endocarditis treated with penicillin in which a total of 92,700,000 units of penicillin were given in repeated courses over a period of 145 days to a patient who had four relapses. The patient eventually was cured. However, because relapses or failures of penicillin to arrest permanently the process of the disease are caused by terminating therapy too soon, the important question concerning the duration of penicillin treatment should be considered. British investigators found that patients receiving 1,000,000 units per day for five days exhibited less response to therapy than did those receiving 250,000 units per day for twenty days.[2]

It must also be borne in mind that the underlying pathology of valvular disease still remains after an attack of subacute bacterial endocarditis and even though the disease has been cured for many months, or years, an acute upper respiratory infection involving the streptococcus may initiate a new attack of bacterial endocarditis.

Bloomfield and Halpern[1] attempted to solve the problem of relapses, following the hypothesis that the present day treatment of subacute bacterial endocarditis was not adequate in duration. They treated a series of eighteen cases of subacute bacterial endocarditis with daily dosages of 160,000 to 200,000 units of penicillin per day for two month periods. There were no relapses.

Favour, Janeway, and Gibson, and Levine[4], who found viable streptococci on heart valves in fatal cases that had recurrences following short courses of penicillin treatment, also suggest that at least two, often three or four and even eight weeks of penicillin treatment may be necessary before the vegetations heal completely.

White, Mathews and Evans[11] also advocate longer trials of therapy. They cite the fact that penicillin fails to kill completely and that one to four per cent of the organisms survive. They state that it has been shown that penicillin will not penetrate the vegetations of subacute bacterial endocarditis. However, if therapy be continued for considerable length of time, the surfaces of the valves may be sterilized long enough to permit scarring to form, with subsequent imprisonment of the existing bacteria within the valves.

The possibility that organisms causing subacute bacterial endocarditis might become resistant to penicillin, as have certain bacteria for sulfonamides, has been a source of worry. Dawson and Hunter[3] in their series of cases found no significant resistance to penicillin. Other investigators have reported sporadic cases of subacute bacterial endocarditis organisms which have exhibited a rise in penicillin resistance. None of the investigators have complained of difficulty in controlling this development. In those cases the dosage of penicillin was increased in order to maintain the blood concentration level of penicillin with the concentration of penicillin *in vitro* necessary to inhibit the organism by a ratio of 3-5 to 1. It can be concluded that repeated sensitivity tests should be done throughout the course of treatment.

Along a similar optimistic vein there seems to be little evidence to believe that penicillin is a strong sensitizing agent to the body according to studies

done by Grolick, Max, and Loewe[6] who performed intracutaneous skin tests with penicillin on 200 subjects who had received penicillin previously.

Many techniques for the administration of penicillin have been advocated, but no one method has proven itself to be superior to all others. Some investigators have concluded that the battle against the organisms of subacute bacterial endocarditis can be waged more efficiently by maintaining a constant high level of penicillin in the blood stream. Consequently, the older method of intermittent injections of penicillin was discarded by those who subsequently began to administer the drug by continuous intravenous route or continuous intramuscular drip methods.

Russek, Smith and Derman[10] concluded that intermittent four-hour injections allowed penicillin blood levels to drop after an hour and a half. Thus, they argued, that the patient was receiving adequate treatment only half the time. They instituted continuous intramuscular drip methods and were satisfied with their results.

More recently, however, Bloomfield and Halpern[1] maintained that continuous constant blood levels of penicillin are not necessary regardless of theory. They believe intermittent intramuscular doses of penicillin, if large enough, are adequate. Their patients were given four to eight intramuscular injections daily for two months. They emphasized the importance of time-dose relationship in that the total duration of treatment is as important as the total daily dosage. Failure will result as readily if the course of treatment is too short as it will if the daily dosage is too small.

Mead, Harris, and Finland[9] found that in some cases, similar or even better clinical results were apparently obtained in spite of the fact that adequate penicillin blood concentrations were maintained only during part of the interval between injections.

Advocates of the continuous penicillin therapy criticize intermittent injections of penicillin because it is painful as well as unreliable. Continuous intramuscular drip therapy is favored by many because the continuous intravenous method is more complicated, delicate, and causes occasional phlebitis at the site of injection. Adherents of the intravenous techniques maintain that intramuscular continuous infusion does not afford constant penicillin blood levels, that absorption from the muscle is somewhat unreliable, and that abscesses occasionally result at the site of injection.

All the above arguments have validity. Perhaps all of them have equal merit if properly applied. It is possible that the oral route of administering penicillin will someday supersede present methods. Also, newer forms of penicillin, as the pure crystaline penicillin which contains a very high percentage of the more effective penicillin G, may prove less irritating and improve our results.

The clinical course of the patient under penicillin therapy bears consideration. Many comments have been made concerning the failure of the patient's temperature to fall during penicillin treatment after the blood stream has been sterilized. Various explanations have been offered: It is due to inadequate treatment; it indicates disintegration and absorption of large vegetations[1]; it is the result of some unrecognized complication; it is a result of local phlebitis at the site of constant intravenous injection[4]; it is the result of inadequate treatment; it is caused by the penicillin itself or by an impurity. Any one or a combination of the above explanations may be the cause of a febrile response.

Important complications of subacute endocarditis that tend to be too little emphasized are cerebral embolism, acute rheumatic fever, congestive failure, and disturbances of mechanisms above or in combination. At the present time these conditions are serious drawbacks to complete recovery even in the very cases that seem to be reacting so well to massive penicillin therapy.

Cardiac failure is in a sense a contraindication to treatment, and decompensated patients may actually become worse under treatment. There is reason to believe that the anatomical changes produced by penicillin treatment involves the seat of vegetative endocarditis and may promote cardiac failure. In other words, we face the paradox that elimination of infection is associated with further distruction of the valves caused by absorption of vegetations resulting in shrunken valves with flat, scarred and calcified plaques. There is a high incidence of cardiac failure beginning after penicillin therapy has been started.

Bloomfield and Halpern[1] noted a high incidence of disturbance of mechanism coincident with penicillin therapy in the treatment of subacute bacterial endocarditis. The question as to whether or not alterations in vegetations and in the valves as a

result of penicillin therapy caused these disturbances, was not decided.

The proper treatment of subacute bacterial endocarditis includes not only an adequate course of penicillin, but also specific attention and proper eradication of chronic foci of infection, including infected tonsils and dental sepsis. The prominent part that dental sepsis plays in subacute bacterial endocarditis is well recognized. Favour, Janeway, Gibson and Levine[4] state that ten per cent of all patients in their series of cases had dental manipulations a few weeks prior to the onset of the disease. They, therefore, advocate the completion of necessary extractions and manipulations while the patients are receiving penicillin therapy the showers of streptococcus viridans which frequently are found in the blood stream immediately following a tooth extraction will be destroyed. Penicillin therapy should be continued until gum healing is complete. Other focal infections should be treated similarly.

Equally important in the care and treatment of a patient with subacute bacterial endocarditis are general measures which will make him comfortable and promote his early return to a state of well being. These include constant and solicitous nursing care, pleasant surroundings, a cheerful optimistic attitude on the part of the hospital staff and relatives, and nutritious food of a high vitamin, high caloric content. Blood transfusions are invaluable in overcoming anemia.[11] Complications previously mentioned should be treated individually and with meticulous care, with full realization of their seriousness in a patient who already is forced to endure a potentially lethal malady.

After a patient has received an intensive course of penicillin therapy which is apparently adequate by all present-day standards, what criteria does the doctor have at his disposal which can aid him in knowing if the treatment has been successful? Consensus indicates that the only reliable criterion is the presence of repeated negative blood cultures.[3] The general condition of the patient, when definitely improved, is a valuable aid in determining the status of the infection. However, the patient may continue to look and feel ill although blood cultures remain sterile after therapy has begun. Sedimentation rates, white blood cell counts and temperatures are worthless as evidence of therapeutic success. Embolic phenomena may continue throughout treatment in a patient who is actually free of the infectious organisms, and constitute a grave danger. They are often the cause of death.

Careful management of convalescence in "arrested" or "cured" cases is a necessity. Reasonable treatment should include a regime similar to that employed in care of cases of acute coronary thrombosis.[8,9] This comprises an adequate period of inactivity to permit repair, followed by a very gradual increase in activity well within the limits of the cardiac reserve. The length of the convalescent period depends on an estimation of the cardiac status of the patient before and after treatment. In addition, the white blood count and the sedimentation rate will gradually return to normal over a period of weeks.[3,5,9]

A few words should be devoted to the appraisal of heparin in conjunction with penicillin treatment of subacute bacterial endocarditis. In 1944 Leowe and his associates administered heparin with penicillin to patients with the disease on the assumption that the anticoagulant drug was valuable because it dissolved the vegetations on the heart valves and permitted greater activity on the part of penicillin.[10] Later investigations have indicated that heparin is not only an unnecessary adjunct to penicillin in the treatment of bacterial endocarditis, but that it is also dangerous. The frequency in which cerebral accidents occur in patients receiving this drug is well known. Moreover, it is expensive; the required daily amount of heparin costs more than does the penicillin and its use adds hundreds of dollars to an already expensive illness.[5] Dawson and Hunter concede heparin to be worthless except in an instance when a large embolus should lodge in a major vessel; the drug might aid in preventing retrograde thrombosis.[3]

The following is a case report of a patient with subacute bacterial endocarditis successfully treated with large doses of penicillin.

Case Report

A white man, aged twenty-eight, an accountant who had had occasional, fleeting "growing pains" at the age of twelve, was told three years ago that he had a heart murmur. The patient was rejected from the army because of this defect. However, he felt well, was active in recreative sports, and was at work until September, 1945, when he developed malaise, loss of pep and appetite, chills, fever, sweats, a 14-pound loss of weight, one episode of bright red spots on the skin, sore fingertips and occasional epistaxis. The patient entered the hospital January 2, 1946. On entry he looked ill, was febrile, and experienced extreme sweats. The heart was overactive, enlarged, and a loud systolic murmur was heard at the apex. The spleen was not palpable nor tender. There was questionable clubbing of the fingers. No pe-

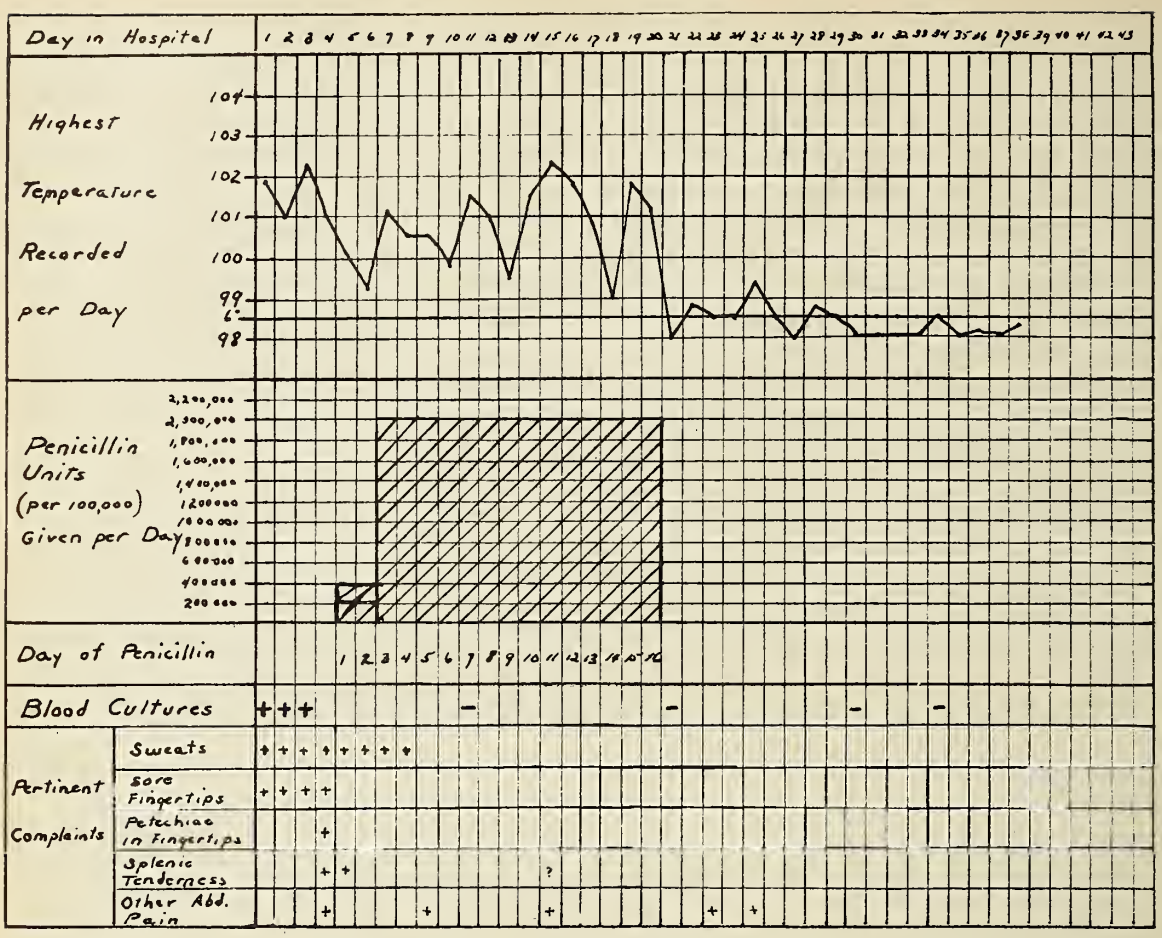


Chart 1.

techiæ; there was definite anemia; sedimentation rate was 54 millimeters in sixty minutes; the urine was negative. Repeated blood cultures revealed numerous colonies of organisms all identified as streptococcus viridans which were inhibited by 0.78 units of penicillin.

Penicillin was started the fifth hospital day in a dosage of 50,000 units intramuscularly every three hours or 400,000 units daily. This regime was continued for two days, at the end of which time massive doses of penicillin totaling 2,000,000 units per day by continuous intramuscular infusion. The penicillin was dissolved in one liter of normal saline solution. The external aspects of the thighs were chosen as the sites for injection. During the entire course of penicillin therapy the patient continued to spike jagged peaks of fever ranging from 101 degrees to 102.4 degrees. Immediately after (see chart) cessation of the massive penicillin therapy, which was given continuously for fourteen days, the patient's temperature dropped to normal and remained there for the duration of his hospital stay. Repeated blood cultures taken both during and after penicillin therapy were negative.

After penicillin therapy was begun, the patient stopped having chills and sweats. Sore fingertips and the one occasion of small petechiae seen under the fingernails disappeared and did not return. Occasional episodes of migrating abdominal pain occurred while the patient was receiving penicillin and also minor pains were felt a short time after termination of therapy. No other definite indications of embolic phenomena were noted. Approximately at the half way mark of therapy after the patient had received 14,000,000 units of penicillin, he appeared to undergo marked improvement in his general appearance, in his feeling of well being, and comfort, despite the fact that his temperature remained elevated. He steadily improved from then on and suffered no relapse. Periodic examinations of his urine were found to be negative and a sedimentation rate on February 4, 1946, was 39 millimeters per hour. The patient was observed for an additional eighteen days after penicillin was discontinued, in which time he steadily gained strength and was gradually allowed to get on his feet. After a 36-day stay in the hospital, the patient was discharged to his home completely free of any symptoms of bacterial endocarditis.

Case follow-up of the patient for six months up to the present time reveals no evidence of recurrence of the disease. Periodic blood cultures have been negative. The patient feels well, has gained ten pounds in weight, and is gradually resuming his former activities. He has now returned to work.

This case presentation is an illustration of the

successful arrest of a proven diagnosis of subacute bacterial endocarditis by the use of massive, continuous intramuscular penicillin treatment. The follow-up of the case has been of a sufficient length of time to state that this has been a cure of the disease. The case is remarkable because of the extremely rapid subsidence of the symptoms and signs of active infection in which the organisms showed relatively high resistance to penicillin *in vitro*.

The case is noteworthy because it illustrates a condition seen commonly in the treatment of subacute bacterial endocarditis with penicillin: the patient continued to exhibit a moderately high grade fever until penicillin was stopped, then immediately, the patient's fever dropped to normal and remained there.

Blood cultures were rendered sterile early in the course of treatment and have remained negative up until the present time. The technique of administering penicillin by continuous intramuscular infusion was entirely satisfactory. The patient suffered little discomfort from this method; indeed, he complained far less of the continuous drip technique which involved giving huge doses of the mold than he did when he received far smaller doses by the intermittent intramuscular method. One point should be recognized in the giving of continuous intramuscular penicillin infusions: while the patient is sleeping, he is apt to turn or toss in bed. In doing so, he might accidentally roll on the tubing of the infusion set and shut the flow of penicillin off for several hours. This occurred once in the above case. Consequently, it behooves the nursing staff to be on the alert for this possibility.

Summary

The subject matter herewith presented shows that while the treatment of subacute bacterial endocarditis with penicillin is established as the most successful ever discovered, a number of problems and technical disagreements still remain.

Several advantages that penicillin possesses over the sulfonamides in the treatment of subacute bacterial endocarditis include the following: it is free from toxic effect, which permits massive dosage in every case; it has little tendency to induce bacterial resistance; sulfa drugs are not capable of destroying the infective organisms on the heart valves.

Strain sensitivity is an important factor which should constitute a means of determining the daily dosage of penicillin. It has been recommended that the concentration of penicillin in the blood stream be at least three to five times higher than the amount of penicillin per cubic centimeter which will inhibit a culture of the individual organisms *in vitro*.

The question of adequate dosage and proper length of treatment is still a debatable one. In an attempt to eradicate the high incidence of relapses of infection, longer courses of therapy offer the greatest assurance of cure. It is often a matter of trial and error, and if relapses occur, treatment must be begun over again and continued for a longer period of time. Sometimes a choice has to be made between larger doses for a shorter period of time or moderate doses carried on for a longer time. It has been shown that courses of penicillin given over periods as long as two months and in adequate dosages will achieve smaller percentages of relapses.

Techniques of administering the penicillin include massive intermittent intramuscular injections, continuous intramuscular drip infusion in saline solution, and similarly prepared continuous intravenous injections. All methods are reliable if the penicillin is given in optimum daily dosages and for a reasonably long time.

During the course of penicillin therapy, complications commonly arise. Among these are cerebral embolism, acute rheumatic fever, congestive failure, and disturbances of mechanism of the heart. Any one of these can be a serious drawback to complete recovery despite penicillin therapy.

A constant elevation of temperature despite sterile blood cultures is commonly seen in patients who are receiving penicillin. The exact cause or causes of this phenomenon cannot be stated. Fortunately, the clinical course and eventual recovery from the disease does not appear to be impeded because of this.

Treatment of dental sepsis, tonsillitis, and other infected foci should be instituted concomittantly with the penicillin treatment of subacute bacterial endocarditis.

General health measures such as good nursing, nutritious food and healthful environmental conditions should be stressed at all times. Blood transfusions should be given generously if they are needed. Complications should be dealt with to the best of the physicians knowledge and training.

The only reliable criterion by which the physician can estimate success or failure of penicillin treatment in subacute bacterial endocarditis is the presence of negative or positive blood cultures.

Gradual and unhurried convalescence which levies no strain on the individual is extremely important.

Heparin is considered a worthless and even a harmful drug to use as an adjunct to penicillin therapy in the treatment of subacute bacterial endocarditis, except to prevent retrograde thrombosis where a large embolus has lodged in a major vessel.

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ARE AMERICAN FAMILIES GROWING LARGER?

More than three million babies were born in 1945, reflecting the increase in the birth rate of the United States between 1933 and 1943 of 30 per cent. According to the calculations by Burch this does not mean that the average American family is growing larger. The principal explanation for the increase appears to be the rise in the marriage rate and the increase of one and two child families. This is deduced from the analysis of the increase in the first, second, third and fourth or higher births in the family. Thus, during the war years 1941 to 1943 the birth rate for all women in the reproductive age increased 22 per cent; first births increased 21 per cent, second births 31 per cent, third births 27 per cent, fourth births 19.5 per cent and fifth births 11.5 per cent. Sixth and seventh births increased 3 per cent, but births of eight or over decreased 3 per cent. The conclusion is that the increase is in one and two child families rather than to enlargement of existing families. The trend has implications for many aspects of American society, including the provision of medical care.—Editorial J.A.M.A., May 18, 1946.

Protecting the People of Michigan from Tuberculosis

By George A. Sherman, M. D.
Lansing, Michigan

SOUND LEGISLATION is a necessary part of any tuberculosis control program. During the last fifty years Michigan has climbed steadily up the ladder of achievement in this regard. The 1945 legislature enacted most of the advances recommended by the various special groups interested in the control of this disease. For a number of years, Michigan has, not without reason, been proud of the official protection provided by law to the people in the state against this dangerous disease.

For many years our physicians have been familiar with the law which declares tuberculosis to be a communicable disease dangerous to the public health. Furthermore, all practicing physicians know that all cases of tuberculosis are reportable. The objectives in reporting are (1) to make certain that precautions are taken against the spread of the disease, (2) care of the patient, and (3) the examination of contacts. Since 1937 the practicing physician has been accustomed to arrange for sanatorium care through his health officer. Since that date the welfare department has almost disappeared from the field of tuberculosis control. The procedure has been as simple as possible—from the practicing physician to the health officer to the sanatorium. However, those of us concerned with this problem have been aware that there still remained some obstacles to the satisfactory isolation of known cases of tuberculosis. These concerned (1) the attitude of a few welfare directors who insisted on applying the "means test" to the individual faced with a long stay in the tuberculosis hospital, (2) the person found to have active tuberculosis but who lacked "settlement" in this state and who continued to be a source of dangerous disease, and (3) the recalcitrant patient who for one reason or another decided it was his constitutional right to remain at large and spread his disease. Most, if not all, of these obstacles were removed by the 1945 legislature in the amendments made to our basic tuberculosis law (Act 314, P. A. 1927).

Dr. Sherman is Director, Bureau of Tuberculosis Control, Michigan Department of Health.

The first obstacle mentioned above has in large part been removed by the inclusion of a new section which reads as follows: "Expenditures of public funds for the treatment or control of tuberculosis or for the treatment, isolation or control of persons afflicted with tuberculosis, shall be considered expenditures for the protection of the public health, and not as moneys advanced in the nature of welfare or relief."

Previous practices, such as requiring a patient to transfer life insurance policies and other assets to the county in return for hospital care (which is primarily a benefit not to the individual but to the community at large) have been done away with as a result of this act. Since the act went into effect in September, 1945, no money has been collected from any patient except when it was offered on a voluntary basis.

Patients found in this state to have active tuberculosis but who do not have "settlement" are now hospitalized promptly through the usual channels and the hospital bill is paid by the state until such time as suitable transfer to the state of residence can be brought about. This sound provision for the protection of our people has not resulted in any serious influx of people with tuberculosis from other states.

It is common knowledge that one of the important reasons why military persons failed to take advantage of care offered them in veteran's hospitals following the first World War was because of the provision which cut off the soldier's pension when hospitalized. In order to overcome this temptation to leave the hospital before maximum benefit is obtained, provision has been made by the Michigan legislature for care at state expense for all persons honorably discharged from the military services of the United States. Unfortunately, up to the present time the Veterans Administration insists on reducing to almost nothing the soldier's pension when hospitalized even though the bill is being paid by the state of Michigan. Measures are now before the Congress to correct this situation and give to our own veterans the benefits which the legislature intended they should have.

A total of 278 persons were in the hospital as of July 31, 1946, at the expense of the State of Michigan, under the provisions of the new law.

(Continued on Page 1240)

Hansen's Disease

A New Name for an Old ondition

Hartman A. Lichtwardt, M.D.
Detroit, Michigan



One hesitates to write about a disease as well known and universal as "Hansen's disease," except that it does give an opportunity to acquaint the medical profession with the new name, which it is felt, should rapidly supersede the better known but unfortunately stigmatic name, leprosy. Those who suffer from this disease feel strongly and naturally that the term "leper" is associated in the minds of many with "outcast," "unclean," "unapproachable," and other ridiculous and unnecessary stigmata.

Another possible justification is the apparent ignorance of some medical men of a subject about which they should know something or say nothing. Readers may recall the unfortunate recent case involving Mrs. Hornbostel, wherein the doctor is quoted as saying[7], "The virus causing leprosy has not been discovered," (he had evidently never read about Hansen's work in 1874), and even more erroneously, "There is a 100 per cent chance of infection for Major Hornbostel if he continues to live with her." Such statements made to the public through the press are not only erroneous but positively harmful in the injustice done to the sufferer from Hansen's disease, and in dissemination of error to a gullible, believing public.

It is well then to review briefly this ancient disease which seems to be of interest not only because of its antiquity, but because, in the minds of many, it can not be cured. The leprologist himself is the first one to admit that there is no cure for Hansen's disease, but that there are certain drugs which may definitely arrest the condition.

Hansen's disease, one of the oldest known diseases in the world, is a chronic specific disease, mildly infectious, and characterized by growth of typical lesions containing the leprabacillus, the mycobacterium leprae of Hansen (1874).

Dr. Lichtwardt is the Medical Director of the Woman's Hospital of Detroit, and for twenty-two years was in Iran, where he was the Iran representative of the American Mission to Lepers, as well as a medical missionary of the Presbyterian Church, U.S.A.

It is an ancient disease called by many names in many lands, but there is no definite proof that the disease called leprosy in the Old Testament is the same as that which we now know as leprosy, although it may have been. It was found in China, India and Egypt thousands of years ago. It was probably spread by various military invasions because in many of these troop movements literally millions of people were involved, and we find that the disease gradually spread westward into Europe, with some of the first recorded cases there being in Greece and Italy. Later it was spread by the Crusaders and by Roman troops in their various campaigns so that leprosy is now found all over northern Europe, as well as in various parts of Asia. It was at its height in Europe in the fourteenth century, and then gradually decreased as various sanitary laws were enacted and enforced, and also as the number of lepers themselves was decreased by bubonic plague and other diseases which infested Europe at that time. It was probably brought over to America by the Spanish and Portuguese, as well as by African slaves which were transported to various American countries.

Among the ancients it was considered a type of cancer, and ancient medical authorities agreed that there was no definite cure for it. An old Persian writer, Joseph, the son of Joseph, writing in Herat in the sixteenth century in one of his quatrains, gives the following advice regarding leprosy.[4]

> "Should leprosy come to one, small or great,
> "All wise men agree 'tis a very sad state,
> Lest symptoms increase do a venisection in time
> And give a decoction of dodder of thyme."

There is no definite survey showing the exact number of lepers throughout the world today, but authorities give estimates of between seven and ten million.[3]

It has been found in practically all lands, hot and cold, but it is definitely worse in countries with a high rainfall and in countries of ignorant people who have low standards of living and little knowledge of hygiene and sanitation. It is not often found in children under the age of ten; but in most lands there is more leprosy among males than among females, usually a ratio of about three to one. Leprosy is not hereditary, but there is no doubt that the children of lepers have a definite susceptibility to the disease and therefore should be taken away from their parents as soon as possible. As yet there is no definite proof as to how leprosy is transmitted from patient to patient. Much work has been done on the theory that leprosy may be transmitted by fleas, flies, bedbugs or other insects, but the work has been only experimental and has not been confirmed by enough observers as yet. The majority of leprologists agree that for anyone to acquire leprosy there must be close and frequent contact with lepers in the active stage of the disease by an individual who himself is run down with malnutrition, malaria or some other condition. Contact is especially dangerous during childhood and that is why the children (of lepers) who are especially susceptible are taken away from their parents as soon as possible. There is no doubt that some cases of Hansen's disease have been caused by direct contact of an individual whose broken skin has come into contact with a leper in the active stage, but it is more probable that leprosy is spread more frequently by the secretions of the nose and throat. There is no proof that leprosy is ever spread by sexual contact.

The mycobacterium leprae of Hansen is found in the corium of the skin and also in nerves. It is a Gram-positive organism, acid-fast, nonmotile and nonsporanginous. It is about .2 to .5 micra wide and is a straight or curved rod, very much like the bacillus tuberculosis, occasionally containing granules. The culture of this organism is very difficult, and although there are many reports of the cultivation, most of these reports have not proven reliable when checked by other observers. The organism itself is usually not very virulent and most human beings seem to have high resistance to it, although in some areas the resistance of certain tribes seems to be much higher than that of other tribes living under the same economic and social conditions.

The entry is probably through the skin or the mucous membranes, and it may be transmitted through the blood stream, although the experimental work which has been done on the blood stream transmission of leprosy has not yet been proven. The incubation period may be from two months to as long as thirty years, but in most cases it is probably from two to four years. It is very difficult to determine the incubation period as many cases of leprosy give such an indefinite history. In some areas one gets a definite history of contact with a leper in about 50 per cent to 60 per cent of the cases.

Hansen's disease is divided into several types, the benign neural type of leprosy and the malignant cutaneous systemic type being the two main divi-

sions, but one finds in many lepers these two types are mixed in various degrees. The beginning nerve changes are first recognized by a macular type of skin lesion with some pigmentation or sometimes depigmentation, with some disturbances in the circulation and disturbances in sensation. This type of lesion usually spreads radially. There is another type, the acroteric, which spreads centrifically and which has disturbances in sensation, as well as the various trophic changes.

In the cutaneous type of leprosy, the leprotic granuloma are usually formed in the corium of the skin and there are various types of nodule formations, varying from the very soft type to a firm hard fibrous type of nodule. There is sometimes degeneration of this tissue and breaking down of the skin with formation of ulcers which after a greater or lesser period, form into scar tissue. The lesions in the mucous membrane of the nose and throat are often early evidence and gradually increase in severity. Very often the cartilage of the septum of the nose is attacked, perforating it, and then finally destroying it. One finds this growth also on the lips, on the tongue and in the larynx interfering often with speech, as well as with swallowing.

The disease may spread to the eyes through the lymphatics or through the blood stream and affect the conjunctiva and cornea. Various types of ulcers are formed. There may be decreased secretion, and the corneal ulcer may form and later perforate causing blindness. The incidence of various types of eye leprosy varies in different parts of the world, but in some of the leper colonies as many as 50 per cent and 60 per cent of the lepers show some type of eye pathology. The lymph nodes in the various parts of the body sometimes enlarge and occasionally there is enlargement of the testes, but never any enlargement of the ovaries. The disease is also found at times in the spleen and liver, but it is rarely noted there except at operation or autopsy.

One of the first symptoms of leprosy is localized anesthesia which may be preceded by areas of superficial hyperesthesia. These areas of hyperesthesia or anesthesia may coincide with areas of depigmentation, but this does not always follow. Skin lesions are also one of the early manifestations, with infiltration of the corium of the skin, and later with actual nodule formation. The subcutaneous lepromata are usually easily distinguished and may be found in various parts of the body. In some cases there have been red papules with fawn-colored borders found on certain areas of the skin, but in many countries none of the lepers show this type of lesion.

In the neural leprosy one finds a thickening of the various nerve structures, especially the ulnar nerve, and these thickenings can be determined by palpation. The lymph glands may be enlarged, especially those of the groin. Among the early symptoms may be noted the loss of hair, especially the hair of the face—the eyebrows, the mustache or whiskers if the patient has had those, accompanied by anhidrosis. Ichthyosis of the skin is sometimes noted.

The trophic changes are really sequelae to the process that has been going on and consist of atrophy, contractures, ulcers, and finally of various types of mutilations. The onset of leprosy is usually very insidious and it may come without any definite prodrome, but may follow other diseases. In most lepers if a careful history has been taken, one will find that his general physical condition is below par and he gives a history of having had malaria, typhoid fever, typhus fever, rheumatic fever, malnutrition, severe exposure or some other like condition. Sometimes fever accompanies the onset of leprosy, but this is not a definite and constant finding. In the neural type of leprosy, the onset is slower than in the cutaneous type and it may cure itself without any treatment of any kind. It is usually accompanied by a definite neuritis and various trophic changes which, of course, are accompanied by pain in the joints affected. There may be ringworm-like lesions in the affected areas, and these lesions, together with the swollen nerve trunks, make the diagnosis comparatively easy. Then as contractures and muscle atrophy set in, one finds the typical claw hand which is seen in so many lepers and also the great perforating ulcers of the feet which often make it impossible for the leper to walk about or to engage in any type of hard physical labor.

One may find paralysis of the facial muscles which give to the leper a characteristic "deadpan" expression. The tear secretions may stop. There may be drooping of the lids of the eyes and various forms of corneal ulceration with perforation and blindness.

The cutaneous type of Hansen's disease is usually much more acute in onset than the neural type and much more malignant in form. If one can get a definite history he will find that it starts out with a

fever, sometimes headaches, malaise, and other symptoms of an acute infection. The lesions are very common in the extremities and in the face (that is, on the exposed parts of the body), and the progress is quite characteristic. The lobes of the ears early become nodular. After some months the leprosy may assume a mixed form of both the cutaneous and neural types with the symptoms of both. The skin on the face forms in huge folds producing leontiasis, or the lion face, which is so characteristic of many lepers.

The lepra reaction is quite often found in the course of cutaneous leprosy. When there are acute exacerbations of the disease after a quiet period of many months or even of many years, the patient develops a fever, the nodules become enlarged and tender and there is neuritis in various parts of the body. This may be produced sometimes by too much treatment and was seen more often in former years when potassium iodide was given in rather large dose to the leper, and even now it is seen in lepers who have had an unusually heavy dosage with the chaulmugra oil or other types of medication.

The tuberculoid leprosy is a variety of the neural type with limited skin lesions. There are no demonstrable bacilli in these lesions, but they are a very distinctive type and can be readily recognized.

The diagnosis of leprosy in the early stages is sometimes quite difficult, although in the later stages anyone who is "leper-conscious" will be able to diagnose the case as the patient enters the room. In making a diagnosis, one first examines the skin to determine the sensation to light touch, the sensation to pain, and the sensation to heat and cold. With an intelligent patient, definite areas can soon be marked out on the skin, but with patients of limited intelligence, it is often difficult to determine just what areas are affected. The skin gradually becomes thickened and rough and dry. One then examines the mucous membranes and looks for lesions in the nose and in the throat and mouth as very often many ulcers are found. Any suspicious area, of course, should be examined to see if the mycobacteria leprae can be isolated.

In doing the bacteriological examination, smears may be made directly from open lesions or by picking up a nodule with a forceps and snipping off the top with a flat scissors, a scraping can be made from the contents of the small nodule itself. If there is any suspicion of the disease, nasal smears should also be made, even though no actual ulceration can be seen in the nose, and in the same way sometimes one can isolate the mycobacteria leprae from smears of the throat when the lesions there are just commencing. These smears are stained very much like the bacillus of tuberculosis, using carbofuchsin and methylene blue; and can usually be found even in the fairly early cutaneous cases.

There has been a lepromin test described by a Japanese investigator and this has been examined at various leprosy hospitals throughout the world, but most investigators have failed to confirm the efficacy of this test. Pardo-Castello believes that it does have a definite value.[6]

The prognosis of leprosy in general is unfavorable, although as I stated before, the neural cases are sometimes self-limited and without any treatment of any kind will entirely disappear. However, many of the neural cases go on and become mixed cases with cutaneous leprosy symptoms also appearing, and then the prognosis is definitely unfavorable; except in the early cases. We have found that cases among children under fifteen respond very readily to active treatment.

In the treatment of leprosy, there are many considerations. First one must definitely eradicate all other diseases. Usually the leper will give a history of several other chronic diseases and these of course, must be treated either before the leprosy is treated, or at the same time, in order that the patient's general resistance may be improved. His general health is very important and his living conditions must usually be improved. In most parts of the world where there are lepers today, their diet is insufficient, if not actually improper, and their housing is very often poor, their clothing is often inadequate for the snow or rain, and they suffer much from general exposure. We found in Iran that after the living conditions of our lepers were improved that they responded much more readily to medical treatment.

Much of the medical treatment of Hansen's disease is still based upon chaulmugra oil, although various other substances have been tried. In the old days the chaulmugra oil was given by mouth and there were some good results, but unfortunately the chaulmugra oil itself has a very disagreeable taste and many lepers after taking it for several weeks or several months would absolutely refuse to take any more, saying they would rather have the

leprosy than the oral treatment with chaulmugra oil!

There have been various refinements in the treatment of Hansen's disease by chaulmugra oil preparations. In many leprosariae, ethyl esters and other derivatives are now used, which may be injected subcutaneously, intramuscularly or intravenously. Usually, because the treatment extends over a long period of time, one uses the various types of treatment at different times on the same leper depending upon his general condition. The injections are sometimes rather painful and they must be discontinued temporarily if the lepra reaction is observed and the leper develops a fever and increased neuritis. The local lesions are cleansed and treated like any other infected area. There is no one drug that has been found that will clear up these lesions. On some of these lesions 10 per cent chromic acid is used, on others trichloracetic acid or silver nitrate, but no one drug has been found which is definitely curative as far as local lesions are concerned.

Among the new drugs which have been found useful in the treatment of Hansen's disease one must mention promin, a sulphone, given intravenously which in many cases has proven to be of great value. Reports from Dr. G. H. Faget[1,2] and his associates at the United States Marine Hospital, Carville, are most encouraging, but all leprologists tend to be conservative in their reports, for they note that results can only be properly evaluated if they cover a great number of cases under detailed supervision. Promizole, another sulphone preparation, can be given orally and is not as toxic as promin, but as yet it has not been used long enough to justify a positive report. Diasone, penicillin, and streptomycin are also being tried in the treatment of Hansen's disease and may give good results.

The various local symptoms have to be treated, of course. In the eye lesions, protargol or some of the other silver salts are used, and we also find that the wearing of dark glasses protects the leper from the strain of severe sunshine. The lesions of the throat are treated with various types of gargles which are more or less useful by their mechanical cleansing effect. Various mild ointments can be used in the nose for the troublesome lesions and dry crusts that form there. The sulpha drugs have not as yet proven to be useful in treatment of Hansen's disease.

The prophylaxis of Hansen's disease is very important, especially the separation of the young babies of lepers from their parents. The sooner that these children are taken away from their parents the less liability there is that they will contract the disease in later life. Inasmuch as we find a greater percentage of Hansen's disease in countries where the people get insufficient food, have improper housing and have little knowledge of hygiene or sanitation, naturally the improvement of living conditions in such lands will tend to prevent leprosy. As general health conditions improve, Hansen's disease will be less and less. Vitamin therapy plays a real part in building up the leper's resistance. Fortunately, the sterility among leper women is quite high and we feel that this natural sterility that accompanies Hansen's disease in various centers throughout the world would make it possible for this disease to be absolutely eradicated.

Tens of thousands of our troops have served in lands where Hansen's disease is endemic, and it is natural that one should wonder if some of them will not develop it after their return. I personally do not believe that there is a great danger of this.[5] But because of the possibility, all practitioners should be leprosy conscious and should consider this possibility in veterans who have a condition difficult of diagnosis.

Hansen's disease is one which is far from hopeless and if all nations in whose territory the disease is found would handle the problem sanely and adequately, this disease could be eradicated within one generation.

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MSMS

VETERANS ENROLL IN BLUE CROSS

Nearly 100,000 World War II veterans and members of their families joined Blue Cross through thirty-one Plans in the special veterans enrollment program conducted during May and June with the co-operation of leading daily newspapers. Participaing Plans enrolled veterans of World War II on a direct payment basis, without regard to date of discharge.

Editorial

DELAY IN CARING FOR VETERANS

Michigan Medical Service was very severely criticized for failure of the veterans' care program in one of our hospital staff meetings just recently, and unjustly. It is again a failure to understand the procedure necessary to get this service done. The veteran must first make application to the Veterans Administration for an authority for examination, which order will be turned over to the Michigan Medical Service and sent out to the veteran from that office. The veteran then comes to his doctor with this request. The doctor makes his examination and fills out the blank, returning it to Michigan Medical Service which in turn returns it to Veterans Administration for adjudication. Neither the doctor nor the veteran can then understand why they both have to wait for weeks until treatment or surgery can be given.

Experience so far is that most of the authorizations for treatment or surgery are coming back very late. This may be following a preliminary examination to determine the veteran's condition and recommendation of kind and amount of treatments, or it may be simply a renewal of authority for further treatments. Both are apt to come toward the end of the month, and carry authorization for four treatments during the current month.

Michigan Medical Service thought it had a very good arrangement for taking care of the veteran in his own home town and by his own doctor, and still thinks so. Michigan Medical Service is not responsible for the delays in the Veterans Administration office. All of these requests, even for extension of treatment over the amount and period first authorized must go back to the Veterans Administration. When returned from the VA the issuance of orders has not been delayed in the Michigan Medical Service office more than forty-eight hours. They have all been processed in less time, sometimes at the expense of holding up writing of checks for payment, there not being enough typewriters.

It would seem that after one determination of service connection, and the responsibility of the government, the veteran and the doctor might be trusted not to abuse the privilege of treatments. Our experience so far is that there would be very few excess treatments, and extra cost to the government. Already doctors and veterans are returning some of the authorizations with the notation that treatment, or certain treatments are not needed. (See note page 1213)

After the first World War there was much delay in furnishing care for veterans. Much of it was never furnished, the whole effort being in examinations and recommendations of treatment which was never authorized. The result was dissatisfaction. Now we believe there is a chance to keep our veterans and their doctors satisfied, at very little extra cost, and the benefits of satisfaction would far outweigh the small cost. Expense does not seem to deter the government in so many of its other activities, especially the proposed compulsory health service. Why not try giving our veterans a real service, and a satisfying management, and cut out the red tape?

We are appealing to our doctors also to try to understand the procedure and give credit where credit is due. Do you realize that as of August 14, 1946, Michigan Medical Service has paid the doctors over $96,000.00, and has so far not received a red cent from the government?

WHAT OF THE FUTURE?

The forces which seem determined to cause the downfall of medicine are still at work. The Seventy-ninth Congress is over unless a special session is called, and we are being lulled to sleep with the thought that we do not now have to worry about the Wagner-Murray-Dingell Bill or others of like implications—that they are dead until reintroduced. That is not true. They are merely dormant and can be revived at any time.

New bills are now being written to take the place of the old ones, and corrections or changes are being made to remove some of the most strongly criticized parts, or coat them over so they will be easier to swallow. There will also be reintroduced into the Michigan Legislature next January more bills similar to those last year just before adjournment—state sized WMD bills.

The subject for discussion for the high school debating for the next school year is "Socialized Medicine." We do not know who engineered

that topic, but think a small, dark-complexioned figure must have been lurking somewhere.

It is whispered in the Senate that President Truman is thinking seriously about calling a special session of Congress for the specific purpose of forcing through the social legislation that failed to pass before adjournment. A grand effort was made to pass that legislation by Senator Pepper when he called up and attempted to have his super EMIC bill undergo a quick hearing and a hoped-for passage.

It is evident we are never to have a breathing spell to attend to our own knitting—that of constantly trying to improve medicine and its distribution by American methods—until we down the monster that is at large. It will need the efforts of every doctor. The officers of the medical societies cannot do the whole job. Every doctor's welfare and voluntary service is at stake. A good fight has been put up, but success calls for unanimous backing by the whole profession. This fight means our very life as individuals. We must run our own show or it will be run for us just as some officious bureaucrat decides. LET *US* MAKE THAT DECISION and run the show.

PROPAGANDA FOR SOCIALIZED MEDICINE

THE PRESENT CONGRESS has adjourned, thus supposedly killing the national health bills which have plagued the medical profession and all citizens who fear increase of socialism in the United States. Most of that special legislation was by-passed. But some place there is an organized propaganda machine at work in favor of the bills. We have recently secured a copy of such a propaganda sheet. There have been others, and will undoubtedly be more. This sheet is being distributed to social workers, welfare workers, et cetera. It reads:

HEALTH BILL HOPES HIGH

7-14-46, Washington—The controversial Wagner-Murray-Dingell national health insurance bill will die with the Seventy-ninth Congress, but Wagner, Murray and Dingell are confident that the legislation will be successful next session.

The bill, called socialistic by the opposition, would provide complete health services— medical care, hospitalization, laboratory tests and appliances—for 80 per cent of the nation's people. The program would be financed by a 3 per cent tax shared on a 50-50 basis by employer and employe.

Senator James E. Murray (Dem.), Montana, chairman of the Senate labor committee and cosponsor of the bill, says sentiment for the legislation is stronger than ever. As a result of three and one-half months of hearings before the labor committee, he said, the bill will be "strengthened and shortened," but no fundamental changes are contemplated.

"We will improve the phraseology to calm those who fear the medical profession will 'deteriorate' under the bill," Murray disclosed. "The new draft will be impervious to that kind of criticism."

He said that the role of the surgeon general of the United States Public Health Service, who will head the national program in collaboration with a non-partisan medical and lay council, will be so clearly defined that opponents cannot allege a "medical dictatorship." Rep. John D. Dingell, House sponsor, expressed confidence that "a practical and all-inclusive health insurance bill, acceptable to doctors, hospitals and the general public, giving greatest benefits at lowest cost, will become law early in the next session." The *Detroit Democrat* asserted that the opposition's case "appears to be crumbling," judging from the preponderantly favorable testimony before the Senate committee.

More than 100 witnesses have appeared before the committee since the hearing opened April 2. Proponents of the bill, who repeatedly stressed that the legislation would remove the economic barrier between doctor and patient, included cabinet members, top government officials, union leaders, physicians and citizen groups.

The facts are stretched as everyone knows who has followed the testimony before the Senate Committee on Labor and Education. The physicians who have testifed *for* the bill have been greatly in the minority and have represented small groups, or have been individuals assuming to speak for intangible personnel. The doctors who would have liked to testify, and some who asked to, were denied the privilege on the ground there was no time to hear them. Senator Murray wrote the Michigan State Medical Society that we could not appear but could send a brief which would be printed so that members of the committee who wished could read it. Under great pressure, he authorized *one* representative of the Michigan State Medical Society to appear in its behalf. The witnesses were hand-selected so that a "preponderantly favorable testimony" could be claimed.

EMIC PROGRAM

WHEN THE EMIC program was proposed in Michigan we were the victims of sharp practice. It was proposed that the soldiers and sailors of the four lower grades had no way of increasing their income, but many of them had married, and a baby under such circumstances would be a financial calamity. The enlisted man would be unable to meet the increased expense. It was a

patriotic and a supposedly popular gesture for the Children's Bureau of the Department of Labor to step in and make themselves good fellows by filling the breach. (Incidentally it was a good chance to put an entering wedge into socializing the medical practice.) NO CREDIT was given the doctors who were taking care of these cases, and would have continued to do so, but they were compelled to accept dictation under the plan or be accused of being unpatriotic.

We were told that this EMIC was just a stop-gap for the duration and six months thereafter. The war in Europe was over May 8, 1945, and the war in Japan was over on August 14, 1945. In both instances that is over a year. Practically all the enlisted men who were to be benefited by this scheme are back in civilian life and have good jobs, or can get them. The plan was really set up for the men in the military service, which at the time had no arrangements for caring for the families of its personnel.

Percy Jones General Hospital has now established a maternity department complete with every convenience including animals painted on the walls of the nursery. The soldiers of the four lower grades can now get maternity and infant care service from the military, and they are entitled to it. This is not a wartime—but a peacetime army, and the army is still under obligations to its personnel, a duty they shirked during the war, thus leading to the EMIC travesty. The same rule holds for the Navy and other services.

When EMIC was started we asked the question how long it would continue, and where it would spread, anticipating that someone with political ambitions would try to extend the program. We were right. The Pepper Bill, S-1318, attempts to do just that. It would extend these services to every mother in the United States, and to every child under eighteen years of age. This is government invasion into the practice of medicine. Call it what you will it is SOCIALIZED MEDICINE or, we prefer, POLITICAL MEDICINE. Take your choice of the terms. President Truman does not like the term "socialized medicine." Neither do Senators Wagner or Murray, nor the dangle Dingell of the House. Murray does not like the term "Political Medicine" either. He complained of that term at one of the hearings on the W-M-D Bill.

The Michigan State Medical Society never officially approved the EMIC program. It was insinuated into our form of existence under threat. Many of our doctors have never accepted or served under EMIC, but have rendered services to wives of servicemen free. Others have co-operated, and by so doing, have by indirection established the approval of the profession. Now the conditions which first stimulated this service have ceased to exist. The actual war is over, the soldiers have returned home, and the six months beyond have long since passed. It is time for us to repudiate the whole program as never having been a necessity, as being a socialistic invasion into medical practice, and as being superfluous from the standpoint of the enlisted personnel.

It is only a matter of justice that the government restore to the medical profession, and to the enlisted personnel of the military forces, what they should never have taken away, our right to individual living, and to services that are a right being rendered in a rightful manner.

LET US IMMEDIATELY REPUDIATE THE EMIC PROGRAM.

POLIOMYELITIS AND TONSILLECTOMY

Poliomyelitis has been on the increase for some years, and its study has given us considerable knowledge as to its infective agent, a virus which has not been seen. We do not yet know the mode of infection. But much research has been done, and various theories advanced.

A few years ago we thought it was an infective organism gaining entrance through the nose and epipharynx. We were taught and many doctors practiced a method of spraying the nose, or painting the membranes with nitrate of silver, zinc, and other substances hoping to *close the pores* so to speak, and block the entrance of the germs into the lymphatics of the upper cervical and meningeal areas. That treatment has been abandoned.

About three years ago an article appeared with a suggestion that tonsillectomy in the periods just previous to the spread of the disease would *open the channels* so that infection would be easier. Two years ago and again last year our own state health commissioner published in the press a warning against having tonsillectomies done as the epidemic period approached. The effects of tonsillectomy on the entrance of the polio virus has been

(Continued on Page 1230)

*President Truman hasn't decided the war is over yet, and neither has Congress. So EMIC may claim it's six months after Truman says "It's all over boys!" The first World War was not officially over until November 11, 1921.

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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

POLIOMYELITIS AND TONSILLECTOMY

(Continued from Page 1228)

a matter of dispute among laryngologists, but many of them have deferred to the suggestions of the health authorities and done them with reserve.

This year the Michigan State Health Department has not made its appeal of the last two years.* The department believes it has discovered a more certain precaution for the prevention of infantile paralysis. (See Dr. DeKleine's paper in the July JOURNAL).

Now another group have entered the arena. Saturday afternoon, August 2, 1946, over a national radio network a program sponsored by the National Foundation for Infantile Paralysis went into great detail in a broadcast for lay people, describing the spaces of the back of the throat and the base of the skull as the courses of invasion of the virus, and very strongly advised against the performing of tonsillectomies in August, September, or October, those being the months of greatest prevalence of polio.

This topic has been mentioned so dogmatically and from such sources of apparent "authority" that it seems a survey might well be made to determine if there is truth in the charge. If doing tonsillectomies during any particular time of the year predisposes young people or others to poliomyelitis, the doctors of the Michigan State Medical Society certainly want to know and, we firmly believe, will gladly co-operate and postpone their tonsil operations until a more favorable season.

We are asking the doctors who read this comment to respond with an answer. How many of you have had a recently operated case acquire infantile paralysis during the past five years? If anyone has had such an experience will you please give us the information? You do not need to sign your name.

It should not be difficult to tabulate the information from the cases on record for the same time and know how many had recent tonsillectomies. How many had tonsillectomies remote enough not to influence the invasion, and how many had never had tonsillectomies? This would give percentages, but would not be conclusive unless there could be some way to determine how many untonsillectomized cases did, and did not develop infantile paralysis.

*The Detroit Health Department has issued a warning against tonsillectomies at this season.

TO DO—OR NOT TO DO?

A FEW HUNDRED cases of infantile paralysis occur in Michigan in the worst years. The death rate is 1 to 5 per cent, and the crippling paralysis is about 10 to 15 per cent. This is a staggering scourge to invade our state. This disease has enjoyed great publicity, and enormous funds have been contributed to study and fight it.

We also have a far worse scourge among us, with vastly greater numbers, a very substantial death rate, and with a far greater crippling percentage. Acute rheumatism of childhood kills its quota. It also takes toll in the form of heart disease and other conditions known to all of us. It has been rather well established that children without tonsils are not so apt to develop the disease, but when once started, or if the disease had started, it is not so apt to produce such drastic complications.

We were told orally that in one city of Michigan a thousand recent tonsillectomized children were surveyed and not one developed polio. In the same city there were twenty-five of these rheumatism cases with one polio.

With the one disease we should not do tonsillectomies. With the other it is accepted practice to remove septic tonsils. Children are out of school during the summertime and in times past many of them have undergone tonsillectomy.

Is there a problem here? Which should we do? Polio is *so* crippling in the cases it does cripple. How about rheumatism with its heart disease? And early death? To do or not to do. We must each of us choose the least evil. We must or we must not remove tonsils This is a question of giving honest advice to our patients. Some research along this line would help.

ON THE RUN

A healthy young person with chronic valvular heart disease is likely to develop recurrent rheumatic fever if exposed to infection by the hemolytic streptococcus.

* * *

Health is not a right that can be demanded. It must be sought for and deserved through conscious intelligent individual effort.

* * *

When pericarditis and pleuritis occur together they are often idiopathic and unexplainable.

* * *

Pregnancy glycosuria follows a high alimentary hyperglycemia rather than a low renal threshold.

—Selected by W. S. REVENO.

ANALYSES OF NUTRITIVE VALUES:



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Protein %	2.63	3.42	3.09	3.91	1.95
Fat %	1.5	0.9	2.1	0.9	0.5
Carbohydrate % by difference	6.4	7.5	7.2	7.6	9.3
Calories per ounce	14	15	17	15	14
Crude Fibre %	0.15	0.29	0.30	0.22	0.43
Calcium %	0.026	0.013	0.046	0.046	0.024
Phosphorus %	0.042	0.065	0.068	0.068	0.051
Iron Mg. per 100 g.	.22	.72	.35	.40	.73
Copper Mg. per 100 g.	.24	.35	.12	.17	.24
Manganese Mg. per 100 g.	.075	.173	.054	.053	.018
Vitamin A—I. U. Per 100 g.	1766	7000	1130	1693	2550
Thiamine Mg. per 100 g.	.018	.080	.036	.037	.069
Riboflavin Mg. per 100 g.	.040	.62	.068	.072	.064
Ascorbic Acid Mg. per 100 g.	1.1	7.3	2.7	3.9	7.5
Niacin Mg. per 100 g.	.77	1.54	1.22	1.29	1.05

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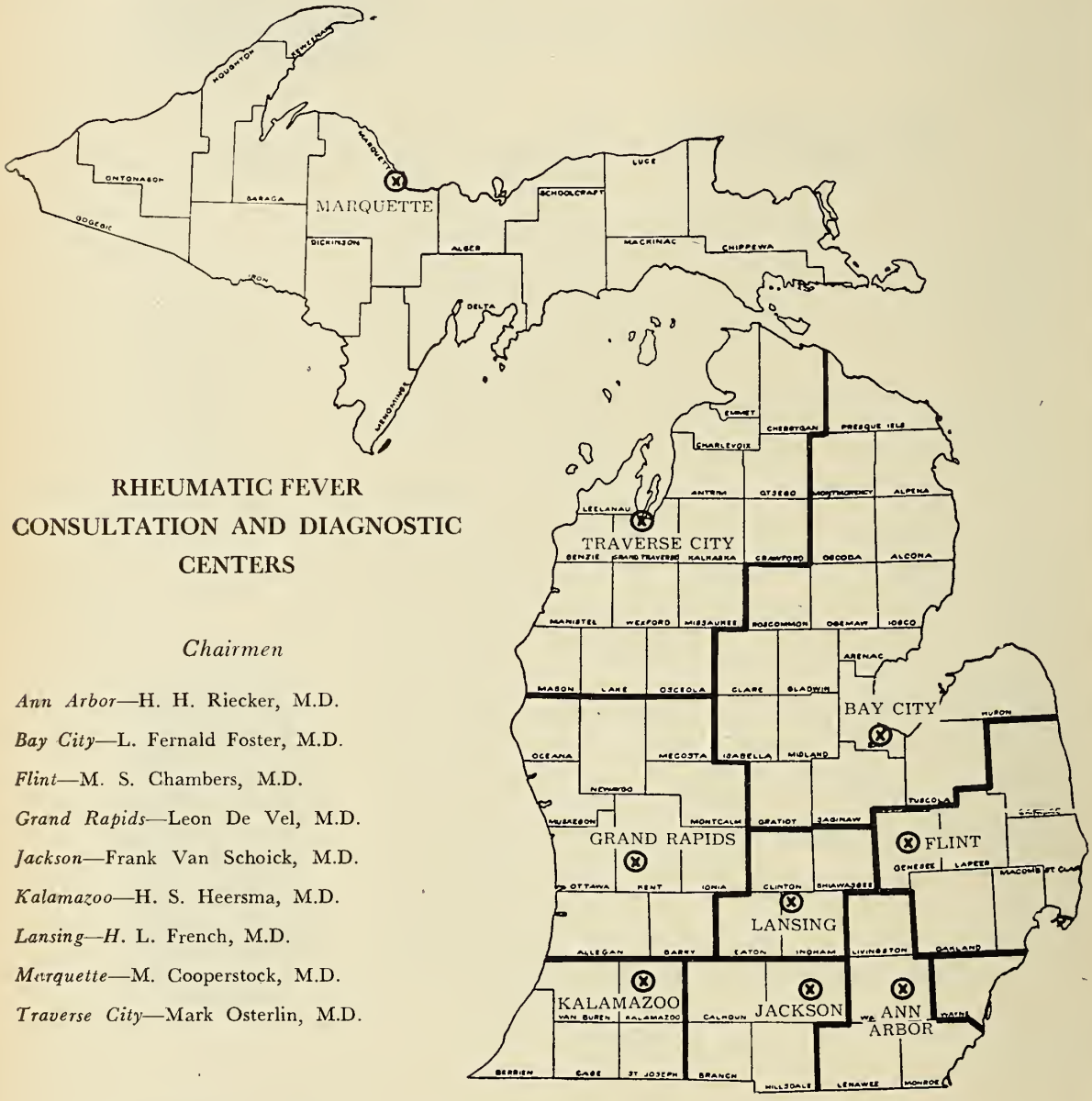
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Quickly prepared... easily calculated: 1 fl. oz. Biolac to 1½ fl. oz. water per lb. of body weight.

The Michigan Postgraduate Program for Graduates in Medicine, Autumn, 1946

The Michigan State Medical Society, in co-operation with the University of Michigan Medical School, Wayne University College of Medicine, and the Michigan Department of Health, announces the extramural postgraduate courses for autumn, 1946.

Centers	Dates
Ann Arbor	October 10 and November 14
Battle Creek-Kalamazoo	October 1 and 15
Bay City	October 16 and November 13
Flint	October 8 and 22
Grand Rapids	October 8 and November 12
Jackson	October 15 and November 19
Lansing	October 22 and November 26
Mt. Clemens	October 9 and November 6
Saginaw	October 8 and November 12
Traverse City	October 9 and November 13

Subjects

1. The Prognostic Significance of the Signs and Symptoms of Heart Disease.
2. The Differential Diagnosis of Chronic Pulmonary Disease.
3. Convulsions in Infancy and Childhood. Differential Diagnosis and Management.
4. Anemias in Infancy and Childhood.
5. Diagnosis and Treatment of Disease of the Peripheral Vascular System.
6. Caesarian Section.

INTRAMURAL COURSES

The Application of the Basic Sciences to Clinical Medicine ..... October 7-November 30, 1946
This course will be repeated March 3 to April 27, 1947. University Hospital, Ann Arbor

Course for Practitioners ..... February 3-February 28, 1947
University Hospital, Ann Arbor

* * *

Clinical Exercises for Practitioners ..... Wednesdays, 9 a.m.—5:00 p.m.
October 9, 1946—May 28, 1947
University Hospital, Ann Arbor

Clinical Internal Medicine ..... Thursdays, 1:30 p.m.—5:00 p.m.
October 3, 1946—December 19, 1946.
February 6—April 24, 1947
University Hospital, Ann Arbor

* * *

Spring, 1947, Courses—University Hospital

Anatomy	Second semester	Thursdays	(East. Med. Bldg.)
Diagnostic Roentgenology	5 days		
Ophthalmology & Otolaryngology	6 days		
Pediatrics	3 days		
Allergy	5 days		
Diseases of the Blood and Blood-forming Organs	5 days		
Gastroenterology	5 days		
Endocrinology and Metabolism	5½ days		
Diseases of the Heart	5 days		
Recent Advances in Therapeutics	5½ days		
Electrocardiographic Diagnosis	5½ days		

For further information, address:

H. H. Cummings, M.D., Chairman
Department of Postgraduate Medicine
University Hospital
Ann Arbor, Michigan

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Proceedings of Mid-Summer Session of the Council, July 18-19, 1946

Two days of discussion and joint meetings with other groups occupied the members of the Council of the Michigan State Medical Society at its 1946 mid-summer session on Mackinac Island.

Following are the highlights of the Council's actions:

The annual report of the Council, for submission to the House of Delegates, was developed and approved. This complete report of a year's activity will require some eighteen printed pages in the "Handbook for Delegates."

The semi-annual financial reports of the society and its public education account, as well as the report of the Publication Committee, Special Committee on Licensure of Hospital Residents, Liaison Committee with the University of Michigan, Prelicensure Medical Education Committee. Committee on Rural Medical Service, Special Committee on Radio, Postgraduate Medical Education Committee, as well as a report on the Michigan Foundation for Medical and Health Education, were presented, discussed, and approved. In addition, a progress report on Michigan Medical Service, including its favorable financial condition, was presented by President R. L. Novy M.D., and Executive Vice President J. C. Ketchum.

The financial condition of the society and the probable need for a special assessment for the year 1947 was considered at length, and referred for further consideration at the September, 1946, session of the Council.

The Council reorganized the Public Relations Committee so that it now has four sub or advisory committees: (a) Special Committee on Radio; (b) Committee on Development of Literature; (c) Committee on Distribution of Literature; (d) Committee on Cinema.

The "Public Relations Plan of the Michigan State Medical Society," outlining the basic plan for public relations including the work done during the first six months of 1946, projects for the second six months, and a tentative program for 1947, was presented, studied, and referred to the Public Relations Committee which was commended upon its high activity.

The Council authorized the appointment of a special committee of the Council to contact the Michigan Crippled Children Commission about necessary revisions in the MCCC Fee Schedule (L. Fernald Foster, M.D., Chairman, Wilfrid Haughey, M.D., P. L. Ledwidge, M.D.).

Problems in publishing JMSMS, and its relationship with the Co-operative Medical Advertising Bureau, Chicago, were presented, discussed and referred to the Publication Committee for final adjudication. The Publication Committee was requested to study and set up a satisfactory policy if possible, concerning limitation of advertising to A.M.A. Council-accepted products, after determination of all factors entering into the matter.

The educational work and program of the Michigan Tuberculosis Association were presented by Theodore Werle, its Executive Director.

R. L. Kempton, M.D., Saginaw, was named chairman of the Joint Committee on Infectious Enteritis; W. H. Alexander, M.D., Iron Mountain, was named as the Upper Peninsula representative to the MSMS Committee on Emergency Medical Service.

The annual joint meeting with the members of the Michigan Crippled Children Commission, and the annual joint session with the Michigan Advisory Council of Health featured the second day of the Council's mid-summer session, at which twenty of the twenty-one councilors were present.

J. Duane Miller, M.D., Grand Rapids, was appointed as councilor of the Fifth District, succeeding A. B. Smith, M.D., Grand Rapids, resigned.

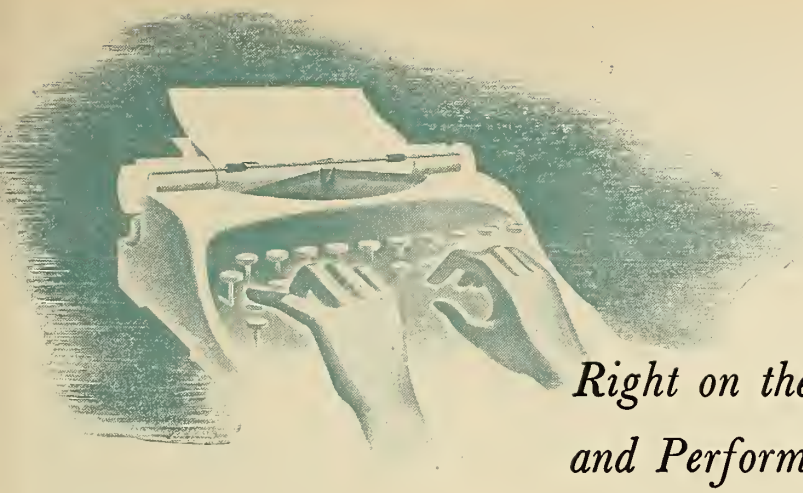
PROTECTING THE PEOPLE OF MICHIGAN FROM TUBERCULOSIS

(Continued from Page 1221)

Of these, 165 were honorably discharged veterans and 113 were persons without legal settlement in any county in Michigan. Since September 6, 1945 when the law went into effect, 474 persons (264 veterans and 210 non-settled) have been cared for at state expense.

The recalcitrant individual represented by that small group of people who for one reason or another will not accept hospital care and thereby be isolated from the public can now be committed to a tuberculosis hospital through the court. If they leave against medical advice, they can be picked up by the state police and returned to any tuberculosis hospital prepared to care for this type of patient. Locked rooms in approved sanatoria can be provided.

Tuberculosis still remains a serious problem in Michigan. Full understanding of the tuberculosis laws of our state by our practicing physicians will go far in bringing our ancient enemy under control.



Right on the Job . . .
and Performing Efficiently

Neo-Synephrine minimizes the distressing nasal symptoms of common colds . . . permits patients to work more comfortably, sleep more restfully—even during the acute stages of coryza.

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For Nasal Decongestion

THERAPEUTIC APPRAISAL: Quick-acting, long-lasting . . . nasal decongestion without appreciable compensatory recongestion; virtually free from cardiac and central nervous system stimulation; consistently effective upon repeated use; no appreciable interference with ciliary activity; isotonic to avoid irritation.

INDICATED for symptomatic relief in common cold, sinusitis, and nasal manifestations of allergy.



ADMINISTRATION may be by dropper, spray or tampon, using the ¼% in saline or in Ringer's solution in most cases—the 1% in saline when a stronger solution is indicated. The ½% jelly in tubes is convenient for patients to carry.

SUPPLIED as ¼% and 1% in isotonic salt solution, and as ¼% in isotonic solution of three chlorides (Ringer's), bottles of 1 fl. oz.; ½% jelly in ⅜ oz. collapsible tubes with applicator.

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Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

MICHIGAN DEPARTMENT OF HEALTH BUREAU OF TUBERCULOSIS CONTROL, 1945, NEW CASES, DEATHS, AND DEATH RATE BY COUNTIES

Counties	New Cases	Deaths	Death rate per 100,000 Population	Counties	New Cases	Deaths	Death rate per 100,000 Population
Alcona	0	0	0.00	Lake	5	4	99.85
Alger	10	5	59.85	Lapeer	30	3	9.94
Allegan	25	6	16.40	Leelanau	1	2	30.63
Alpena	12	2	10.69	Lenawee	36	11	20.76
Antrim	5	3	36.26	Livingston	15	4	19.51
Arenac	3	1	13.09	Luce	9	1	15.19
Baraga	7	1	15.76	Mackinac	3	1	14.33
Barry	5	1	4.79	Macomb	83	30	20.66
Bay	43	15	19.43	Manistee	18	3	19.51
Benzie	5	4	65.31	Marquette	59	12	29.59
Berrien	66	37	39.54	Mason	4	0	0.00
Branch	26	6	24.13	Mecosta	7	0	0.00
Calhoun	80	23	23.06	Menominee	13	6	28.25
Cass	11	8	36.75	Midland	12	4	14.07
Charlevoix	1	1	9.21	Missaukee	2	1	15.44
Cheboygan	10	5	46.16	Monroe	41	15	24.53
Chippewa	17	7	26.77	Montcalm	6	2	7.83
Clare	5	0	0.00	Montmorency	0	0	0.00
Clinton	13	2	7.37	Muskegon	75	21	18.27
Crawford	1	1	38.24	Newaygo	8	2	11.51
Delta	22	13	46.55	Oakland	303	58	17.86
Dickinson	20	19	84.48	Oceana	2	1	7.56
Eaton	18	5	15.01	Ogemaw	9	3	44.30
Emmett	0	1	8.42	Ontonagon	12	6	67.73
Genesee	147	55	24.10	Osceola	1	0	0.00
Gladwin	3	0	0.00	Oscoda	1	0	0.00
Gogebic	38	14	56.86	Otsego	1	0	0.00
Gd. Traverse	14	7	31.95	Ottawa	17	3	5.08
Gratiot	11	2	6.88	Presque Isle	5	4	39.54
Hillsdale	3	2	7.12	Roscommon	1	0	0.00
Houghton	54	17	46.40	Saginaw	131	26	20.10
Huron	17	7	24.37	Sanilac	18	8	30.19
Ingham	209	15	11.02	Schoolcraft	4	2	26.21
Ionia	20	5	14.93	Shiawassee	21	8	20.56
Iosco	1	1	13.47	St. Clair	53	23	29.95
Iron	24	8	49.07	St. Joseph	8	5	17.19
Isabella	16	5	22.75	Tuscola	53	2	5.90
Jackson	56	12	12.62	Van Buren	29	6	18.67
Kalamazoo	47	20	19.65	Washtenaw	115	24	20.08
Kalkaska	2	0	0.00	Wayne	3055	1071	49.31
Kent	130	48	20.78	Wexford	8	2	13.15
Keweenaw	1	0	0.00	TOTAL	5472	1758	32.35

INCIDENCE OF COMMUNICABLE DISEASE

Disease	July, 1946	July, 1945	Seven year median
Diphtheria	32	41	14
Gonorrhea	937	1174	893
Lobar Pneumonia	57	74	92
Measles	869	466	584
Meningococcic Meningitis	11	15	4
Pertussis	798	484	945
Poliomyelitis	73	19	21
Scarlet fever	208	318	278
Syphilis	1608	1475	1229
Tuberculosis	517	374	543
Typhoid fever	25	7	7
Undulent fever	17	40	11
Smallpox	0	4	4

CHANGE IN BUREAU NAME

Effective August 1, the Bureau of Epidemiology of the Department became the Bureau of Disease Control. F. S. Leeder, M.D., D.P.H.(Tor.), remains director of the Bureau.

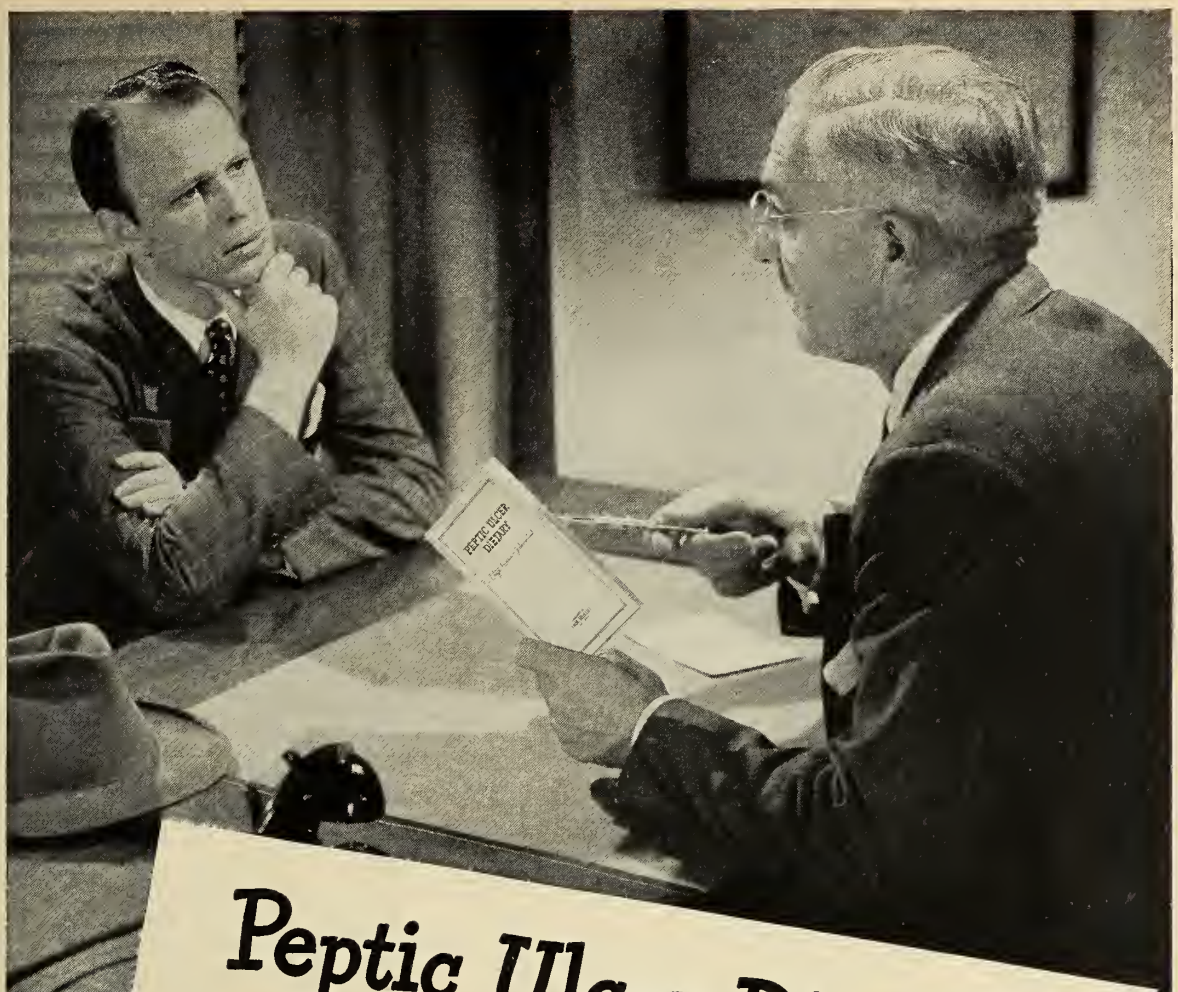
JUNE MARRIAGES BREAK RECORD

June marriages in Michigan reached an all-time high of 10,965. Total for the first six months of 1946 was 36,262 as compared to 19,796 for the same period in 1945.

NEWS OF PERSONNEL

Gladys Kleinschmidt, M.D., who since 1944 has been director of the Isabella County Health Department, resigned effective July 31. Dr. Kleinschmidt is leaving the state to join her husband, Earl E. Kleinschmidt, M.D., who is now associated with the Cook County

(Continued on Page 1248)



Peptic Ulcer Dietary

Gelatine studies have shown the way in peptic ulcer management

The use of a bland protein for its acid neutralizing properties and supplemental food value is gaining enthusiastic medical support.

Peptic Ulcer Dietary, details a proved method for the use of Knox Gelatine in the management of various types of peptic ulcer.

Written in simple language, clearly understandable, we believe your patients will find it a practical guide once you have prescribed.

Peptic Ulcer Dietary contains:

1. *A short introduction* on the principles of peptic ulcer feeding.
2. *Special Ulcer Diet.* Bland, and liberal in calories and protein, many doctors regularly prescribe this diet just as it's given in the Knox Booklet.
3. *Diet for and management of bleeding peptic ulcer.*
4. *Several pages of suitable recipes* that can be made easily and quickly in the home.

We'll be glad to send you, without any obligation whatever, as many copies of *Peptic Ulcer Dietary* as you wish. Address your request to Knox Gelatine, Dept. 401, Johnstown, N. Y.

KNOX GELATINE (U. S. P.)

PLAIN, UNFLAVORED GELATINE...ALL PROTEIN, NO SUGAR



NEWS OF PERSONNEL

(Continued from Page 1244)

(Illinois) Tuberculosis Association. Charlotte Young, R.N., has been appointed acting director of the department.

Buell H. VanLeuven, M.D., resigned his position as medical consultant for the state Vocational Rehabilitation Division to return to the Grand Traverse-Leelanau District Health Department as director effective July 1, 1946. He replaced C. F. Atkinson, M.D., who resigned.

Nathaniel H. Cooper, M.D., F.A.C.P., assistant director of the Calhoun County Health Department, was appointed acting director of the Allegan County Health Department on a part-time basis, effective June 17, 1946. Dr. Cooper replaces M. B. Beckett, M.D., M.P.H., who resigned to accept a position at University Hospital, Ann Arbor.

Laura Kronquist, M.D., resigned as director of District Health Department No. 6, effective June 24.

Little Joe Genius says—

I see that very few of the witnesses at the Senate hearings on the National Compulsory Health Bill had ever read the bill.

Little Joe Genius says—

I see where Fiorello LaGuardia says he is not worried about the costs of the National Health Bill. He is a true New Dealer.

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NEW CASES REPORTED, DEATHS AND DEATH RATES FROM TUBERCULOSIS, BY STATES, 1945. (PROVISIONAL FIGURES AS REPORTED BY STATE DEPARTMENTS OF HEALTH)

State	New cases reported[1]	No. of deaths (recorded)	Cases per death	Death rate per 100,000 population[2]
United States	117,400	52,330	2.2	39.7
Alabama	2,690	1,161	2.3	41.3
Arizona	1,298	961	1.4	152.5
Arkansas	1,203	756	1.6	42.5
California	11,198	3,840	2.9	43.5
Colorado	1,035	537	1.9	47.9
Connecticut	1,293	635	2.0	35.5
Delaware	196	102	1.9	35.6
District of Columbia	1,753	581[3]	3.0	61.9
Florida	1,086	701	1.5	29.4
Georgia	2,057	1,109	1.9	34.7
Idaho	289	70	4.1	14.0
Illinois	6,333	3,091	2.0	40.0
Indiana	3,039	1,099	2.8	32.0
Iowa	911	338	2.7	15.0
Kansas	660	327	2.0	18.8
Kentucky	2,330	1,458	1.6	56.6
Louisiana	2,288	1,122	2.0	45.7
Maine	478	240	2.0	30.5
Maryland	3,145	1,202[3]	2.6	56.6
Massachusetts	2,839	1,636	1.7	39.1
Michigan	5,468	1,758	3.1	32.1
Minnesota	2,187	628	3.5	25.1
Mississippi	1,615	687	2.4	33.0
Missouri	2,111	1,355	1.6	38.1
Montana	399	166	2.4	36.3
Nebraska	446	170	2.6	14.2
Nevada	147	80	1.8	50.1
New Hampshire	141	91	1.5	20.1
New Jersey	3,413	1,726	2.0	41.1
New Mexico	3,042	474	6.4	88.6
New York	12,897	6,131	2.1	48.7
North Carolina	2,318	1,417	1.6	40.4
North Dakota	239	113	2.1	21.7
Ohio	5,787	2,573	2.2	37.4
Oklahoma	2,561	789	3.2	38.8
Oregon	550[4]	271	2.0[5]	22.5
Pennsylvania	4,461	3,759	1.2	40.9
Rhode Island	859	247	3.5	32.6
South Carolina	776	610	1.3	32.0
South Dakota	318	156	2.0	28.1
Tennessee	4,367	1,689	2.6	58.7
Texas	6,708	2,923	2.3	43.1
Utah	155	75	2.1	12.2
Vermont	256	104	2.5	33.5
Virginia	3,066[4]	1,309	2.3[5]	42.4
Washington	2,570	716	3.6	34.3
West Virginia	1,830	694	2.6	40.2
Wisconsin	2,548	630	4.0	21.3
Wyoming	44	23	1.9	9.3
Hawaii	1,186	294	4.0	[6]
Puerto Rico	[7]	[7]	[7]	[7]

[1]Special effort is made to obtain the number of new cases reported exclusive of "primary" or "childhood type" cases which are reportable in some states.

[2]Death rates are based on the population for July 1, 1945, including members of the armed forces in continental United States, but excluding those overseas, as estimated by the U. S. Bureau of the Census

[3]Deaths of District of Columbia residents which occurred at Glenn Dale Sanatorium in Maryland have been added to the deaths which occurred in the District of Columbia and subtracted from the number which occurred in Maryland.

[4]Includes pulmonary tuberculosis only.

[5]The ratio is inexact since it is based on deaths from all forms of tuberculosis and cases of pulmonary tuberculosis.

[6]Death rate not computed because no reliable population estimate is available for 1945.

[7]No report received from Puerto Rico.

Benzedrine Inhaler, N.N.R.
"... is quite effective in the clearing of nasal congestion due to allergy or infection"

Feinberg, S. M.: Allergy in Practice,
Chicago, The Year Book Publishers, Inc., 1944, p. 502.

Your hay fever patients will be grateful...particularly between office visits...for the relief of nasal congestion afforded by Benzedrine Inhaler, N. N. R.
The Inhaler may make all the difference between weeks of acute misery and weeks of comparative comfort.

Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 250 mg.; menthol, 12.5 mg.; and aromatics.



Benzedrine Inhaler
a better means of nasal medication

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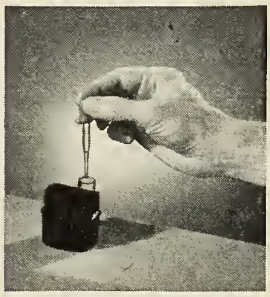
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Simply drop one Clinitest Tablet into test tube containing proper amount of diluted urine. Allow time for reaction, compare with color scale.

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Clinitest Laboratory Outfit (No. 2108) Includes—Tablets for 180 tests, test tubes, rack, droppers, color scale, instructions. Additional tablets can be purchased as required.

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Clinitest Plastic Pocket-Size Set (No. 2106) Includes—All essentials for testing—in a small, durable pocket-size case of Tenite plastic.



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Correspondence

Editor's comment: The article referred to in the following correspondence was quoted by us in an attempt to give our readers a picture of the background working for interests which are certainly not ours. We had no intention of publishing untruths. We have confidence in our sources of information, and are giving our readers the editors' note in the *Rocky Mountain Journal* that accompanied the correspondence sent us by Mr. Falk under franked mail, but was not quoted by him.

"Editor's Note: As stated in the letter from Mr. Falk, comments on his career appearing in our April Editorial were quoted from an address by Marjorie Shearon, Ph.D., who was formerly employed in the division of the Social Security Board now headed by Mr. Falk. We publish his letter in full as his own statement of his career.

"We would repeat again, however, the well-established fact that since the time Mr. Falk became associated with the Social Security Board, the recommendations of that board have offered only one solution to the problem of medical care for the American people, a nation-wide system of compulsory sickness insurance. While in our opinion such compulsion would be a big step toward complete national socialism of the recent and unlamented German type, it is obviously a very small step toward real solution of the admittedly great problems of public health and medical care. This is especially true when we consider that the agency promoting the scheme is financed and empowered by federal law to make continuous studies of medical care and to offer recommendations for improvement in its distribution."

July 26, 1946

Dr. Wilfrid Haughey
Editor, The Journal of the
Michigan Medical Society
610 Post Building
Battle Creek, Michigan

My dear Dr. Haughey:

It has just come to my attention that the JOURNAL OF THE MICHIGAN MEDICAL SOCIETY for June, 1946, reprinted—under the heading "Editorial Comment"—an "Editorial" entitled "The Political Machine Behind the W-M-D Bill" which originally appeared in the *Rocky Mountain Medical Journal* for April, 1946.

That "Editorial" is a tissue of untruths, misrepresentations and distortions. I so informed the Managing Editor of the *Rocky Mountain Medical Journal* in a

(Continued on Page 1258)

Say you saw it in the Journal of the Michigan State Medical Society

Selective Bile Acid Therapy in Impaired Fat Digestion

Because of its complex composition, whole bile exerts a multiplicity of pharmacologic actions. When bile is administered for a single purpose, numerous other actions, often undesirable, must be tolerated.

With Degalol, c.p. deoxycholic acid, specificity of action is available. A normal constituent of human bile, Degalol represents the fraction principally concerned with fat digestion and absorption. In the dosage required, Degalol exerts little choleretic action, hence is especially superior when excessive biliary stimulation must be avoided.

Degalol is specifically indicated for the correction of impaired fat digestion and to promote absorption of the fat soluble vitamins D, E, and K, and carotene. It is useful in overcoming epigastric distress due to fatty foods, and should be given whenever fat digestion and absorption of the fat soluble vitamins is impaired, as for instance in catarrhal or obstructive jaundice.

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One or two 1½ gr. tablets t.i.d. Supplied in boxes of 100 sani-taped tablets.

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(Continued from Page 1254)

letter dated May 17, 1946. My letter was published in the June, 1946, issue of that *Journal,* on the page corresponding to that which had originally carried the "Editorial."

In view of the unfairness and the slanderous nature of the attack on me in the original "Editorial," I ask that you publish in your JOURNAL, directly, the letter which I addressed to the Managing Editor of the *Rocky Mountain Medical Journal.* A photostat copy of that letter is enclosed.

Sincerely yours,
I. S. Falk
Director, Social Security Administration

FEDERAL SECURITY AGENCY
SOCIAL SECURITY BOARD
Washington, D. C.

Bureau of Research and Statistics
Mr. Harvey T. Sethman — May 17, 1946.
Managing Editor,
Denver, Colorado.

My dear Mr. Sethman:

My attention has been called to the editorial, "The Political Machine Behind the W-M-D Bill, in the April, 1946, issue of the *Rocky Mountain Medical Journal,* pages 289-291. I am writing to protest your publication of this editorial—in large part a personal attack upon me, and based on "a talk by Marjorie Shearon, Ph.D. . . . Research Analyst for the Conference of the Minority, United States Senate." It seems extraordinary that you would publish such an editorial, or would publish it without giving me an opportunity to comment on the alleged facts or to reply simultaneously to this attack on me.

Throughout the editorial, almost every sentence dealing with matters about which I am informed and containing anything susceptible to factual test or verification is erroneous. I select a few statements for specific comment.

1. Your editorial said about me: "False claims regarding his 'cure' for influenza led to his being fired from the University of Chicago and to his grudge against the medical profession."

The fact is that I resigned from the university at a time and for reasons having no relation to my influenza studies. I never claimed that I had a "cure" for influenza. My first report on influenza etiological studies was made on Dec. 12, 1929. Discussions about leaving the University of Chicago and joining the staff of the Committee on the Costs of Medical Care had begun in the preceding summer; those discussions were definitive by early August, 1929; my resignation (to take effect upon the close of the Autumn Quarter, 1929) was submitted to the Vice President of the university on Sept. 24, 1929, and was accepted by him with regret on the 28th of that month—approximately two and one-half months before my first report on the etiology of

(Continued on Page 1262)

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Possess the Power of Adsorbtion – Induce Sedation and Relaxation

● The basic properties of Bellkatal are: Kaolin Colloidal 7½ grs., a protective to the mucous membrane and an adsorbent of irritant secretions; Belladonna Root ¼ gr., a sedative and relaxant of the autonomic nervous system; Phenobarbital ⅛ gr., a sedative to the central nervous system.

The name Hartz with its background of 40 years of precise manufacturing methods assures physicians and hospitals *of the formula exactness* of Bellkatal.

Results attained through the use of Bellkatal following indications of nervous indigestion, vomiting, pain and gas after eating, and intestinal disturbances have *convinced* Physicians of its *effectiveness.*

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(Continued from Page 1258)

influenza. As for having a "grudge against the medical profession," that has no more basis in fact than the rest of the sentence quoted.

2. Your first paragraph about me goes on to say that I then became the Director of Research for the Committee on the Costs of Medical Care; and proceeds with the sentence, "Thus he has become classed as an 'expert' on the basis of data which is out-dated (if ever creditable) and some of which has been re-dated with obvious ulterior motives; . . ." There are several points here and I wish to comment on each of them.

First, I became Associate Director of Study for the Committee, and held that position until the committee completed its five-year program and disbanded. As for becoming an "expert," I had taught and published on public health and related subjects for nearly ten years—at Yale University and at the University of Chicago—before joining the committee's staff in December, 1929. I believe I can fairly state that I was "classed as an expert" before I joined the staff of the committee, and afterward when on the staffs of the Milbank Memorial Fund and of the Social Security Board.

As for the dating of the committee reports, each was dated when it was published, and I have never known of any re-dating of any of those reports.

The credibility of the reports of the Committee on the Costs of Medical Care is attested by the literature on medical economics and the writings of people competent to judge credibility in this field. Also, I invite your attention to the publication procedure, followed by the committee and stated in its publications, which assured that each report of the research staff was carefully reviewed by the committee and published with its approval.

3. Your paragraph about me indicates that I joined the staff of the Social Security Board. It goes on to say "But in 1940, four men ahead of him disappeared and Falk became Director of Research and Statistics—in perfect keeping with his sleight-of-hand manipulations."'

The facts are as follows. I joined the staff of the Social Security Board in December, 1936. In 1938, the Director of the Bureau of Research and Statistics resigned and resumed his work as a university professor of law. Before leaving, he advised the Associate Director, who succeeded him as Director, that he recommend me to the board for the position of Assistant Director; he did, and I was appointed to that position. Early in 1940, the Director of the Bureau was asked by the board to become Director of the Bureau of Unemployment Compensation, and he accepted the transfer from the research and statistcs bureau to that bureau. At the same conference with the Chairman of the board at which the Director was advised of the board's invitation with respect to him, I received the first information of its invitation to advance me from Assistant Director to Director of Research and Statistics. Neither of my two predecessors in the position of Director has "disappeared"; both are carrying on their work; and both are my good friends.

(Continued on Page 1264)

There is No Forgetting...

NO LAPSE IN ANTIRACHITIC PROPHYLAXIS

LIBBY'S Evaporated Milk—homogenized and fortified with at least 400 U.S.P. Units of Vitamin D per pint of evaporated milk—provides a quality milk for infant and child feeding.

The Vitamin-D content of this milk gives automatic prophylaxis against rickets. When used routinely, Libby's Evaporated Milk insures against any lapse in antirachitic prophylaxis due to oversight or temporary inability to obtain the vitamin in another form; it makes for constant and optimal Vitamin-D utilization, so necessary to growth and physical development.

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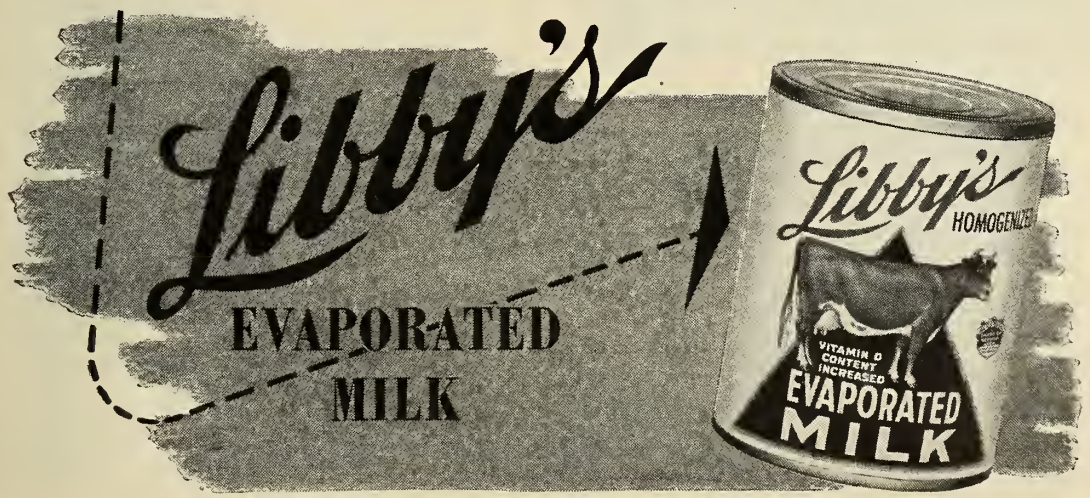
Note the analysis of this quality milk. Each can, containing 13 fluidounces, provides:

Calories	569	Phosphorus	0.82 Gm.
Protein	28 Gm.	Vitamin A	1762 U.S.P. Units
Fat	32 Gm.	Thiamine	0.19 mg.
Lactose	40 Gm.	Riboflavin	1.46 mg.
Calcium	1.02 Gm.	Ascorbic Acid	5.06 mg.
		Vitamin D_3	325 U.S.P. Units

400 U.S.P. UNITS Vitamin D_3 PER PINT

Libby's Evaporated Milk is all that quality milk can be in nutrient value, in vitamin content, in careful processing, in sterility, in flavor.

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(Continued from Page 1262)

As in the case of the few illustrative examples so with the rest of your editorial. It is based upon misstatements about the Bureau of Research and Statistics, its staff and its work. Your statements about my relations to the 1939 Wagner health bill, to the 1943 Wagner-Murray-Dingell bill, and to Dr. Parran on that bill, etc., are similar distortions.

In light of various remarks in your editorial concerning the work of the Bureau of Research and Statistics, may I add that its work (on old-age, survivors and disability insurance, unemployment compensation, health insurance, public assistance, social security finances, and related subjects), and also that of other bureaus of the Social Security Board, is specifically authorized and required by an Act of Congress.

I do not doubt that you have the right to criticize the Wagner-Murray-Dingell bill if you are opposed to it, and to publish editorial comment on it. I do object, however, to your publishing incorrect statements about me personally, and about the organization with which I am associated and its work. If you had made an effort to check on your information, before publication, you could have easily ascertained the facts.

In view of the circulation you have already given the editorial to which I have referred, I ask that you publish this letter in your *Journal,* directly, so that your readers may be informed of its contents.

Sincerely yours,
(Signed) I. S. FALK, Director.

From the *Rocky Mountain Medical Journal,* June, 1946 (pp.457-8).

HEALTH AND FITNESS

During World War II the United States Government and the American Medical Association had a Joint Committee on Physical Fitness. With the end of the war the government withdrew and the American Medical Association representatives thereafter constituted an Association Committee on Physical Fitness. This committee requested the Bureau of Health Education to suggest plans by which the American Medical Association could contribute to the improvement of health and physical fitness in the postwar period.

The plan submitted by the Bureau, approved by the Board of Trustees and included in the 1946 Bureau budget, called for the employment of two professional persons and necessary clerical help to conduct a program promoting fitness through co-operation with the nation's schools. A physician, Dr. Dean F. Smiley, and a physical educator, Fred V. Hein, Ph. D., have been employed and added to the staff of the Bureau of Health Education. Their duties will be to study health educa-

(Continued on Page 1282)

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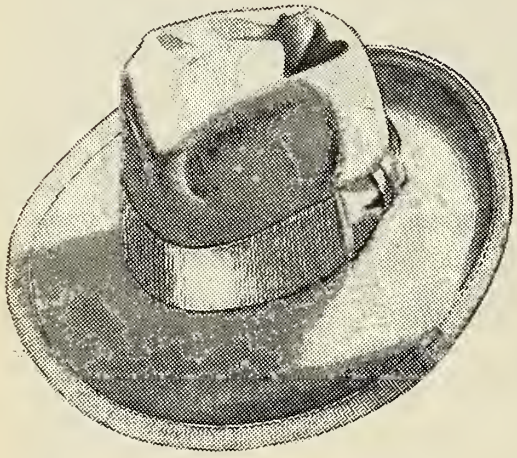


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In Memoriam

Edward D. Crowley, M.D., Jackson, was born in Jackson on October 27, 1898, where he spent virtually his entire life. He was a graduate of the University of St. Louis Medical School in 1923. He was the first Jackson physician to volunteer for military service in World War II. He served in the Navy Medical Corps, holding the rank of commander at the time of his separation from service. Doctor Crowley died June 19, 1946, at the Veterans Hospital, Battle Creek.

* * *

Willard E. Fischer, M.D., Wayne, was born in 1911 He graduated from Wayne University College of Medicine in 1939. He served with Ninth Air Force in European Theater of Operations, arriving overseas in 1944. Doctor Fischer died at his home on March 6, 1946.

* * *

Fred B. Fisk, M.D., Jonesville, was born in Fowlerville, August 6, 1879. He graduated from Detroit College of Medicine in 1903. He first practiced in North Adams, Highland Park and, for the past twenty-four years, in Jonesville. Doctor Fisk died on April 21, 1946.

* * *

Don W. Gudakunst, M.D., New York, formerly of Michigan, was born in Paulding, Ohio, in 1894. Doctor Gudakunst served as State Commissioner of Health for Michigan in 1938 and 1939. For many years he was director of school health service in Detroit and in 1929 was elevated to the post of deputy commissioner. He became medical director of the National Foundation for Infantile Paralysis in 1940, which position he held at the time of his sudden death in Chicago on January 20, 1946.

* * *

Robert Cary Jamieson, M.D., Detroit, was born in Detroit on September 18, 1881. He graduated from Detroit College of Medicine in 1903, and did postgraduate work in Vienna and London in 1905 and 1906. He was a member of Founders Group of American Board of Dermatology and Syphilology, and served as secretary, editor, president and trustee of Wayne County Medical Society at various times. He was professor and head of the department of dermatology, Wayne University College of Medicine, until 1945. Doctor Jamieson died on April 17, 1946.

* * *

David M. Kane, M.D., Sturgis, was born in Sturgis on October 17, 1881. He graduated from University of Michigan Medical School in 1904. He was a past president of St. Joseph County Medical Society. Doctor Kane died suddenly on June 15, 1946, in Utah, while en route to attend the American Medical Association annual session.

(Continued on Page 1268)

Say you saw it in the Journal of the Michigan State Medical Society

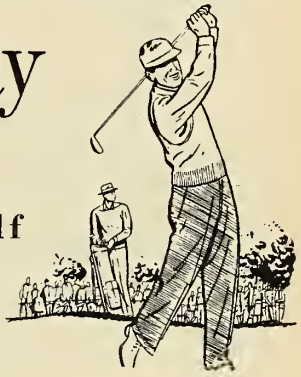


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(Continued from Page 1266)

Isaac Newton La Victorie, M.D., Kalamazoo and Ionia, was born in Brooklyn, New York, January 26, 1903. He graduated from University of Pittsburgh in 1924 and from Yale Medical School in 1928. He served at the Kalamazoo State Hospital from 1929 to 1937 and as psychiatrist at Southern Michigan State Prison and the Ionia Reformatory. In 1941 he entered the Navy Medical Corps and was sent to the Philippine Islands in May of that year, where he was taken prisoner by the Japanese on January 2, 1942, not to be released until January 30, 1945. Doctor La Victorie held the rank of commander at the time of his death on March 2, 1946.

* * *

William Clark Lawrence, M.D., Detroit, was born in 1880 in Michigan. He graduated from Detroit College of Medicine in 1904 and practiced in Detroit his entire life. He was a member of the Detroit Athletic Club and Rotary, and was active in Boy Scout work. Doctor Lawrence died at Walloon Lake on June 30, 1946.

* * *

Ralphael W. MacGregor, M.D., Flint, was born at Birch Run, Michigan, on November 26, 1898. He graduated from University of Michigan Medical School in 1924, and practiced continuously in Flint. Doctor MacGregor died on April 14, 1946.

* * *

Elta Mason, M.D., Flint, was born in 1878. He graduated from Loyola University School of Medicine, Chicago, 1921. He served on staffs of state tuberculosis sanatoria in Wisconsin, West Virginia, and Massachusetts, and practiced in Flint for past ten years. Doctor Mason died on March 30, 1946.

* * *

John W. Moore, M.D., Flint, was born in 1891. He graduated from Detroit College of Medicine and Surgery in 1917, and has practiced in Flint since 1919. Doctor Moore died on June 17, 1946.

* * *

William J. O'Reilly, M.D., Saginaw, was born in 1864. He graduated from Detroit College of Medicine in 1890. He practiced continuously in Saginaw for fifty-six years. He was an emeritus member of the Michigan State Medical Society since 1940. Doctor O'Reilly died on March 27, 1946.

* * *

Clara V. Radabaugh, M.D., Battle Creek, was born in Ottawa, Ohio, on March 9, 1874. She graduated from American Medical Missionary College in 1909, and was associated with Battle Creek Sanitarium practically all her years of practice. Doctor Radabaugh died April 13, 1946.

* * *

James H. Sanderson, M.D., Detroit, was born in Coburg, Ontario, in 1861. He graduated from Michigan College of Medicine in 1890 and practiced in Detroit for forty-eight years. He was an emeritus member of the Michigan State Medical Society since 1940. He

(Continued on Page 1270)

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(Continued from Page 1268)

had been secretary of the Wayne County Medical Society in 1897 and 1898. Doctor Sanderson died on January 30, 1946.

* * *

Matthew R. Slattery, M.D., a member of the Bay County Medical Society, died May 1, 1946. He was graduated from the Detroit College of Medicine and Surgery in 1914 and practiced continuously in Bay City with exception of the period he served as Medical Officer in the U. S. Army. Dr. Slattery joined the National Guard and was sent to the Mexican border in 1916. From there he was transferred back to duty with the Michigan Troops and was stationed at Grayling before accompanying them to Waco, Texas, where they became part of the 32nd Division. He was made Commanding Officer of the 128th Ambulance Company and held that post during the first World War. After the signing of the Armistice he went to Germany with the Army of Occupation and was discharged April 12, 1919.

Dr. Slattery was a member of the Knights of Columbus, The Elks, Bay City Country Club, and the Chamber of Commerce. He was also a member of the Military Order of Foreign Wars, The American College of Military Surgeons, and the Harding-Oak-Craidge Post 18 of the American Legion.

Born June 15, 1890, in Jackson, Dr. Slattery came to Bay City in 1905. After attending Parochial Schools in Jackson he was graduated from the Bay City Eastern High School in 1910. He then entered the Detroit College of Medicine and Surgery.

On October 10, 1922 he married Miss Marion Tierney. Besides his widow Dr. Slattery is survived by two children, Mrs. Ralph Rubenstein of Bay City, Pvt. John Slattery, who is serving with the United States Marine Corps in China, and a grandson, Randy.

Dr. Slattery leaves a host of friends in Bay City, Detroit and Jackson, and will be sadly missed by those who knew and loved him.

F. H. D.

* * *

Rollin H. Stevens, M.D., Detroit, was born in Blenheim, Ontario. He graduated from University of Michigan Medical School in 1899. He was founder and president of Detroit Institute for Cancer Research; a pioneer in radiology, being a past president of the Radiological Society of North America and the American Radium Society; a trustee of the Michigan Foundation for Medical and Health Education; an emeritus member of the Michigan State Medical Society since 1939. Doctor Stevens died on May 17, 1946.

* * *

William Krafft Ward, M.D., Detroit, graduated from George Washington University School of Medicine in 1899. He served six years as a commissioned medical officer of the United States Public Health Service. Since 1910, he has been associated with Parke, Davis and was head of their correspondence department at the time of his death on May 10, 1946.

* * *

Frederic Scott Wilson, M.D., Detroit, was born in Leamington, Ontario. He moved to Detroit forty-five years ago where he lived until his death. He was a graduate of Detroit College of Medicine in 1915. Doctor Wilson died on June 10, 1946.

* * *

George R. Wright, M.D., Montrose, was born in Coldwater in 1867. He graduated from University of Michigan and Bellevue Hospital Medical College, New York, 1889. He practiced in Flushing and Montrose. Doctor Wright died on April 30, 1946.

AUTHORIZATION NECESSARY

Service to veterans, under the Michigan Plan and the agreement with the Veterans Administration and the State Office of Veterans' Affairs, should not be rendered by doctors of medicine without a *written authorization* from these governmental agencies, or from Michigan Medical Service.

No compensation will be paid by the VA or the State Office of Veterans' Affairs to physicians who render service without authorization; where a physician renders more service than is authorized, payment will be made only for the service that was authorized.

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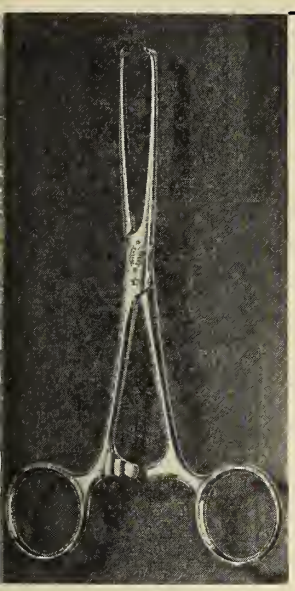
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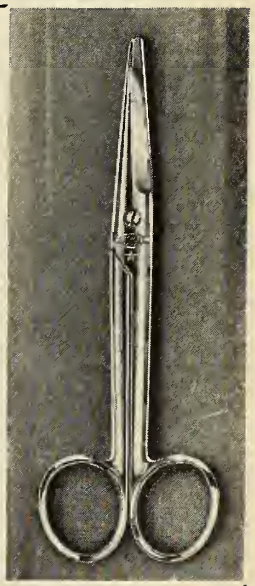
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What's What

Carleton Dean, M.D., Lansing, addressed the Berrien County Medical Society on October 9 on the subject "The Rheumatic Fever Control Program in Michigan."

* * *

Lee Carrick, M.D., Detroit, is the author of an original article, "Therapy for Tineacapitis," which appeared in JAMA of August 10.

* * *

An Orientation Course in Clinical Allergy, under the sponsorship of the American Academy of Allergy, will be held October 7-11, 1946, at Marquette University School of Medicine, Milwaukee. For detailed information write Ebon J. Carey, M.D., Dean, 561 N. 15th St., Milwaukee.

* * *

L. Fernald Foster, M.D., Bay City, secretary of the Michigan State Medical Society, was guest speaker at the annual convention of the State Association of County Social Welfare Boards, Sault Ste. Marie, September 17. Dr. Foster's subject was "The Philosophy Behind the Uniform Fee Schedule for Governmental Agencies."

* * *

The New York Times and the Wagner-Murray-Dingell Bill: "A continuation of the hearing (on S. 1606), it was indicated, would have put into the record a concentrated opposition to the program largely from the medical profession. Among the witnesses asked not to appear were representatives of organizations vigorously opposed to the legislation, it was reported."

Accent on *"asked not to appear!"*

* * *

Senator Homer P. Ferguson of Michigan introduced into the Congressional Record of June 6 the *Collier's* article "The Doctors Run The Show," written by Bill Davidson, describing the Michigan medical plan for veterans.

Senator Ferguson has been thanked for this recognition to Michigan and its medical profession and its group medical care plan (Michigan Medical Service).

* * *

"Doctor of Medicine" is the title of a new series of radio programs prepared through the co-operation of the Special Committee on Radio of the Michigan State Medical Society and sponsored, as a public service, by the Hack Shoe Company.

Station CKLW, Windsor, will broadcast these talks at 1:05 p.m. each Friday, commencing September 13. There will be a change of time in October due to time changes in the East.

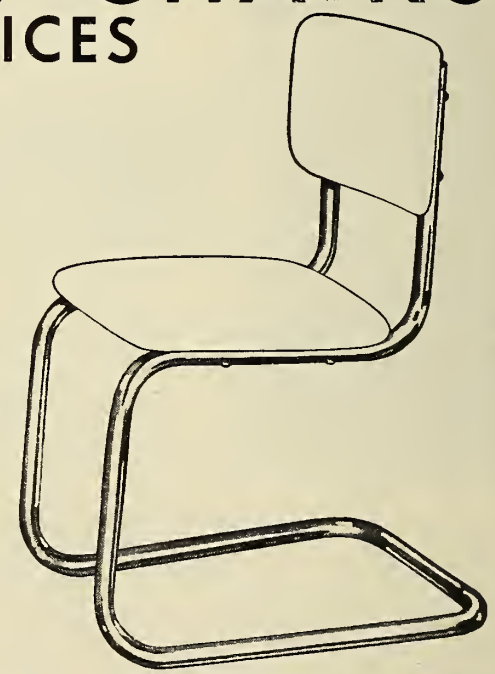
This program is one of a series arranged for the pur-

(Continued on Page 1276)

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(Continued from Page 1274)

pose of disseminating authentic health information to the public through doctors of medicine and will also interpret to lay persons the viewpoint of the MSMS on matters of medical moment.

* * *

Wilfrid Haughey, M.D., editor JMSMS, talked before the Marshall Exchange Club Tuesday, July 30, on the subject of Political Medicine, discussing the attempts to socialize medicine, the various bills that would affect the practice from the federal government level. He talked about the Wagner, Murray, Dingell bills, the Pepper bill, and the one sponsored by the medical profession, the Taft bill, which does not socialize medicine, but does provide means for the average individual to provide his own care.

* * *

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Not too many advertisers use coupons in JMSMS, but when they do, it's mighty helpful if you, as a co-owner of the JOURNAL, co-operate. For example, in the July, 1946, number of JMSMS, only two coupons appeared: pages 973 and 996.

S. 191, the hospital construction bill, has been passed by Congress and signed by President Truman.

Briefly, the United States will aid states and communities in the erection of needed hospitals by furnishing one-third the cost, the other two-thirds to be furnished by the state or local government. The sum of 375 million dollars has been provided annually, for five years, to accomplish the purposes of the legislation.

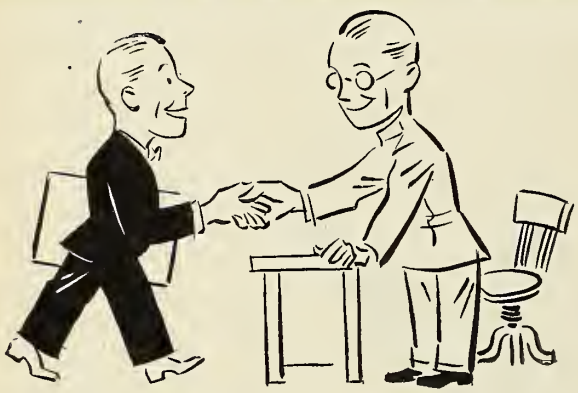
The Hospital Survey Commission of Michigan, of which A. S. Brunk, M.D., Detroit, is a member of the Executive Committee, has just completed a year's survey of hospital facilities and needs in this state. Michigan is one of the first states prepared with adequate data to furnish the federal government as a basis for the building of necessary hospitals.

* * *

Michigan's representatives to the Wagner-Murray-Dingell Bill hearing: Dr. Novy, president, Michigan State Medical Society, appeared with Mr. J. C. Ketchum. He carefully and clearly explained the organization and growth of the Michigan Medical Service.

The final paragraph of his address reads: "From our experience in Michigan, we are certain that a true spirit of co-operation between voluntary health care organizations and governmental health agencies can produce for the nation the most effective, enduring and progressive system of health care. Voluntary health organizations should not attempt to do the whole job any more than

(Continued on Page 1278)



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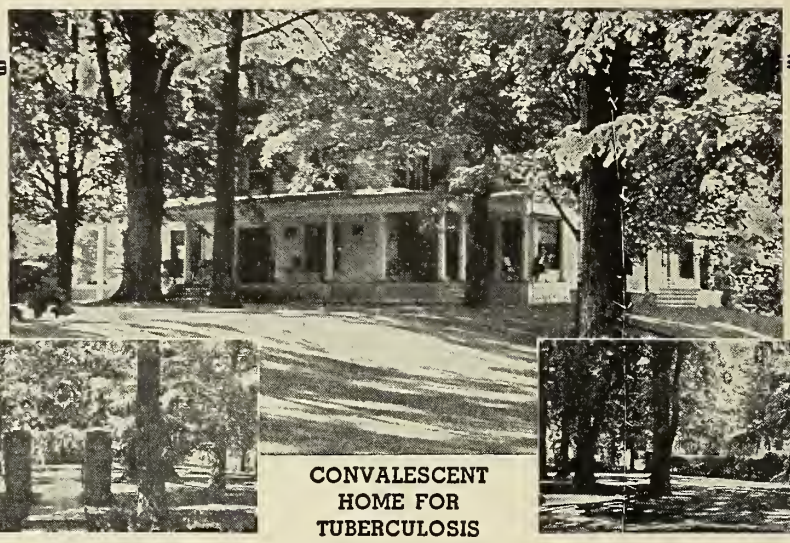
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1. Freund, J., and Thomson, K. J., Science, 101:468, 1945.
2. Cohn, A., Kornblith, B., Grunstein, I., Thomson, K. J., and Freund, J. (a) Proc. Soc. Exper. Biol. & Med., 59-145, 1945, (b) Venereal Diseases Information (U. S. Public Health Service), 1946, in press.

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(Continued from Page 1276)

should government attempt to do so, for the reason that any monopoly of health services, whether economic or otherwise, inevitably will lead to degeneration of the entire system. For greatest continued progress, it is imperative that there be maintained the sort of health care system which is characterized by a proper spirit of competition and by the existence of natural checks and balances in the best American tradition."

His statement was accepted without much questioning. When the second witness, George F. Addes, secretary-treasurer of the United Automobile Workers, testified, he stated that his organization definitely supports the bill and he questioned the effectiveness and success of the Michigan Medical Service. Dr. Novy was recalled by the Committee to explain some of the charges made by Mr. Addes. It was quite apparent that Addes' challenges of Dr. Novy's statement were unfounded.

* * *

Quite a furor arose in the Senate during the past week over release of a statement by Senator Claude Pepper of Florida, indicating that his Subcommittee on Wartime Health and Education had favored a national compulsory health insurance plan. The committee statement was given wide newspaper publicity, with the inference that it was an endorsement of the Wagner-Murray-Dingell Bill.

Senators Donnell of Missouri, Smith of New Jersey, and Taft of Ohio, protested the action of their colleague from Florida. Some seven pages of the Congressional Record are filled with their statements. Senator Donnell sharply rebuked Pepper for his action.

On the following day Senator Pepper gave his answer, admitting that "there was some slight inaccuracy in the press release."

Principal charges by Senator Donnell were to the effect that the study, given such widespread publicity and referred to as an endorsement of the Wagner-Murray-Dingell Bill, was actually just a reprint of a report printed and dated in March of 1946, the only changes being the insertion of titles above certain pictorial illustrations.

It was charged that Senator Pepper erred in giving his report to the press, rather than to the full committee; that the subcommittee had not met and authorized the issuance of the report; that only four of the nine members of the subcommittee had signed the report. It was emphatically pointed out that the report, originally dated March, 1946, had been issued *before* the hearings even started on S.1606 (the W-M-D Bill). Yet it was referred to as the result of a "two-year health insurance study" and substantial approval of President Truman's health insurance message and the Wagner-Murray-Dingell National Health Bill.—*Washington Letter of United Public Health League*, July 30, 1946.

* * *

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Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

ANESTHESIA IN GENERAL PRACTICE. By Stuart C. Cullen, M. D., Head of Division of Anesthesiology, Department of Surgery, State University of Iowa Hospitals; Associate Professor of Surgery (Anesthesiology) State University of Iowa College of Medicine. Chicago: The Year Book Publishers, Inc. Price $3.50.

This is a very complete small manual of anesthesiology giving the whole procedure in sufficient detail. The Preanesthetic medication, and discussion of various forms of anesthesia. Inhalation, spinal, infiltration. There is a chapter on the choice of anesthetic agent, and technique. Also a chapter on oxygen therapy, and on the recognition and treatment of shock.

DISEASES OF THE RETINA. By Herman Elwyn, M.D., Senior Assistant Surgeon, New York Eye and Ear Infirmary. With 170 Illustrations, nineteen in Color. Philadelphia: The Blackiston Company. 1946. Price $10.00.

Diseases of the retina are described in great detail giving the causes and physiological foundation for the changes produced. The chapter on essential hypertension does not go into the four stages so frequently given, but describes it as a progressing entity. Night blindness is given prominent place. Retinal changes in various systemic diseases are pictured and described. Abnormalities, tumors, detachments are all illustrated and described very understandingly. We like the book and feel it covers a neglected field.

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PSYCHOTHERAPY IN GENERAL PRACTICE. Report of an Experimental Postgraduate Course. By Geddes Smith, Associate. The Commonwealth Fund. New York: The Commonwealth Fund, 1946. Single Copies $0.25.

This is a detailed description of a course held at the University of Minnesota the first two weeks of April, 1946. This is the report of the work as carried out and tells of the lists of lectures, courses and instructions. Twenty-five persons took the course. The book is abundantly worth reading to anyone interested in this subject.

DIABETES: A CONCISE PRESENTATION. By Henry J. John, M.D., M.A., F.A.C.P., Lt. Col., MC, Cleveland, Ohio. St. Louis: C. V. Mosby Company. 1946. Price $3.25.

Dr. John has produced a compact and very practical treatise on diabetes and its treatment. He emphasises especially the aspect of diabetes and its relation to surgery, Diabetes in children and its hereditary aspect. There is an interesting chapter on "do's" and "don'ts," charts, and numerous sample meal schedules. The book is small enough for the pocket.

NEW AND NONOFFICIAL REMEDIES, 1946, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1946. P. 770. Chicago: American Medical Association, 1946. Cloth. Price, postpaid, $1.50.

New and Nonofficial Remedies is the book in which are listed and described the medicinal preparations which the Council on Pharmacy and Chemistry has found acceptable, under its rules, for the use of physicians. To have a product accepted, the manufacturer must declare its composition, give adequate proof of its therapeutic value and market it with claims which have been found valid by the Council. The present volume represents a cumulative epitome of the Council's work since its foundation in 1905.

Accepted preparations are grouped in twenty-four classifications ranging from Allergenic Preparations to Vitamins. Ordinarily, an inclusive general article precedes the description of the various products. The monograph for the products set forth the actions, uses and dosage and usually a set of tests and standards. As its name implies, the book is intended to describe nonofficial preparations, that is, preparations which are not included in such official publications as the Pharmacopeia and the National Formulary. However, some official articles are listed and described, these being in general those for which the Council feels the practicing physician needs concise and authoritative information. In the preface of the present volume, the Council lists some thirty-five official drugs ranging from acetylsalicylic acid to Strophanthin, which the Council feels it no longer necessary to consider for inclusion in the book. However, in most cases, a brief monograph on actions, uses and dosage gives information useful to the physician and for the control and advertising of marketed preparations.

ANNUAL REPRINTS of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1945. P.122. Chicago: American Medical Association, 1946. Cloth. Price, postpaid, $1.00.

Originally intended chiefly as a repository of its reports on rejection of preparations found unacceptable for inclusion in *New and Nonofficial Remedies* or of status reports on products whose therapeutic value has not yet been established, this volume in recent years has



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been composed mainly of reports giving general information to the physician on the status of various therapeutic agents and therapeutic procedures. Most of these reports have previously been published in *The Journal of the A.M.A.* The reports in the present volume emphasize the educational nature of the Council's work and bear witness to its leadership in the consideration of current therapeutic problems.

The report "Dermatophytosis: Treatment and Prophylaxis," gives a concise estimate of progress in this field and sets up useful standards for the evaluation of fungicidal preparations. The report on "Dangers from the External Use of Sulfonamides," obviously stems from wartime experience with these preparations and issues a warning against over-the-counter sales. The report "Status of Poison Ivy Extracts" emphasizes the fact that these preparations are to be used in prevention rather than treatment. The report of Acne Bacillus Vaccine points out that this preparation, in the opinion of most investigators, fails in most cases clinically to arrest or control acne vulgaris. In the report "The Status of Passive Immunization and Treatment in Pertussis by the Use of Human Hyperimmune Serum" prepared by Dr. Harriet M. Felton and sponsored by the Council, the status of these preparations was definitively outlined just prior to the acceptance by the Council of a number of commercial preparations.

This volume as well as preceding Annual Reprints are of interest not only to physicians but also to pharmacists, chemists and pharmaceutical manufacturers, in fact to all who are interested in the progress of drug therapy.

HEALTH AND FITNESS

(Continued from Page 1264)

tion and physical education in our schools and the preparation of teachers for functioning in these fields. Information will be collected and a clearing house established on courses of study, materials, school health service programs and physical education. The relationship of environmental conditions and administrative situations to health and fitness will also be studied. These consultants will be available in the field to study situations and participate in planning locally for the establishment or improvement of health programs. No attempt will be made to "sell" a hard and fast program. Efforts will be devoted to co-operative planning for the improvement of our school programs leading to better health and fitness and the existence of these programs where they do not exist. The consultants will work in close co-operation with the Joint Committee on Health Problems in Education which the National Education Association and the American Medical Association have long maintained. The services of these consultants will be available to state and local medical societies by correspondence or field trips. No local co-operation will be entered into with agencies outside the medical profession except through local medical channels or with local medical approval. The entire plan is based on the theory that better health and greater fitness for the nation can be achieved only through the nation's schools. The primary purpose of these consultants will be planning and consultation; promotional activities will be secondary, but either Doctor Smiley or Doctor Hein will be available for local engagements to address men's luncheon clubs, women's organizations, and meetings of professional persons, medical or educational, upon invitation or approval of the local medical society.

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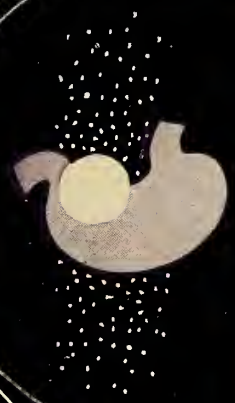
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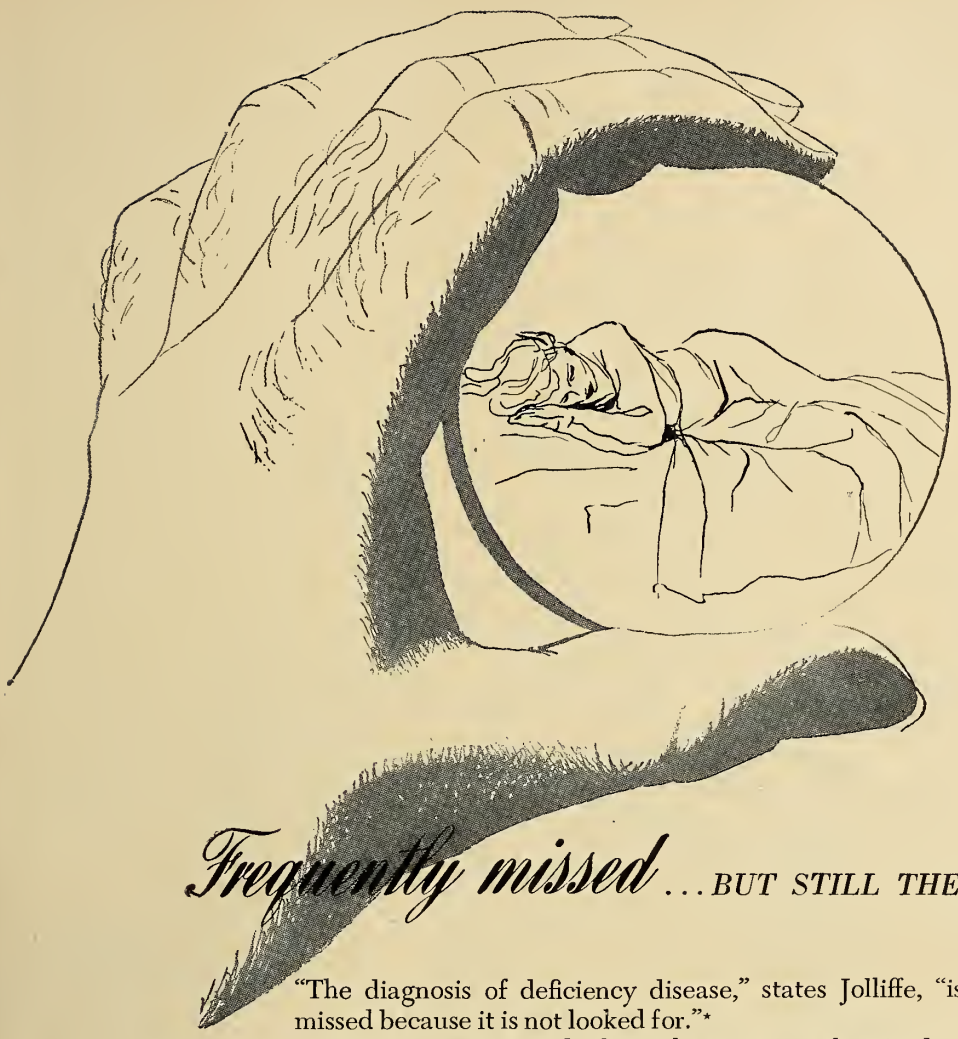
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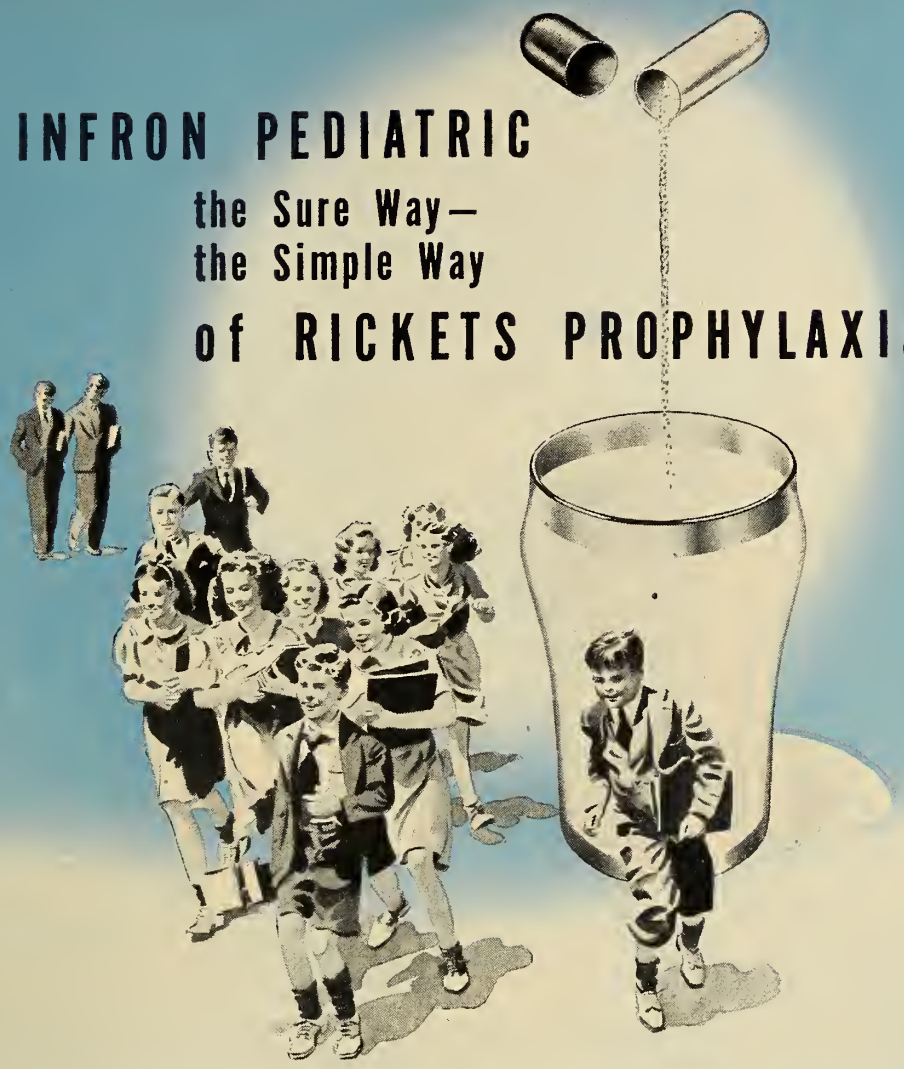
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"That the campaign for funds in behalf of the Michigan Foundation for Medical and Health Education be continued during the ensuing year, and that the House of Delegates appoint its individual members as a special committee to encourage other doctors of medicine, as well as laymen interested in sound medical service and education, to contribute during the next 365 days, as generously as their means permit, to the Michigan Foundation for Medical and Health Education."

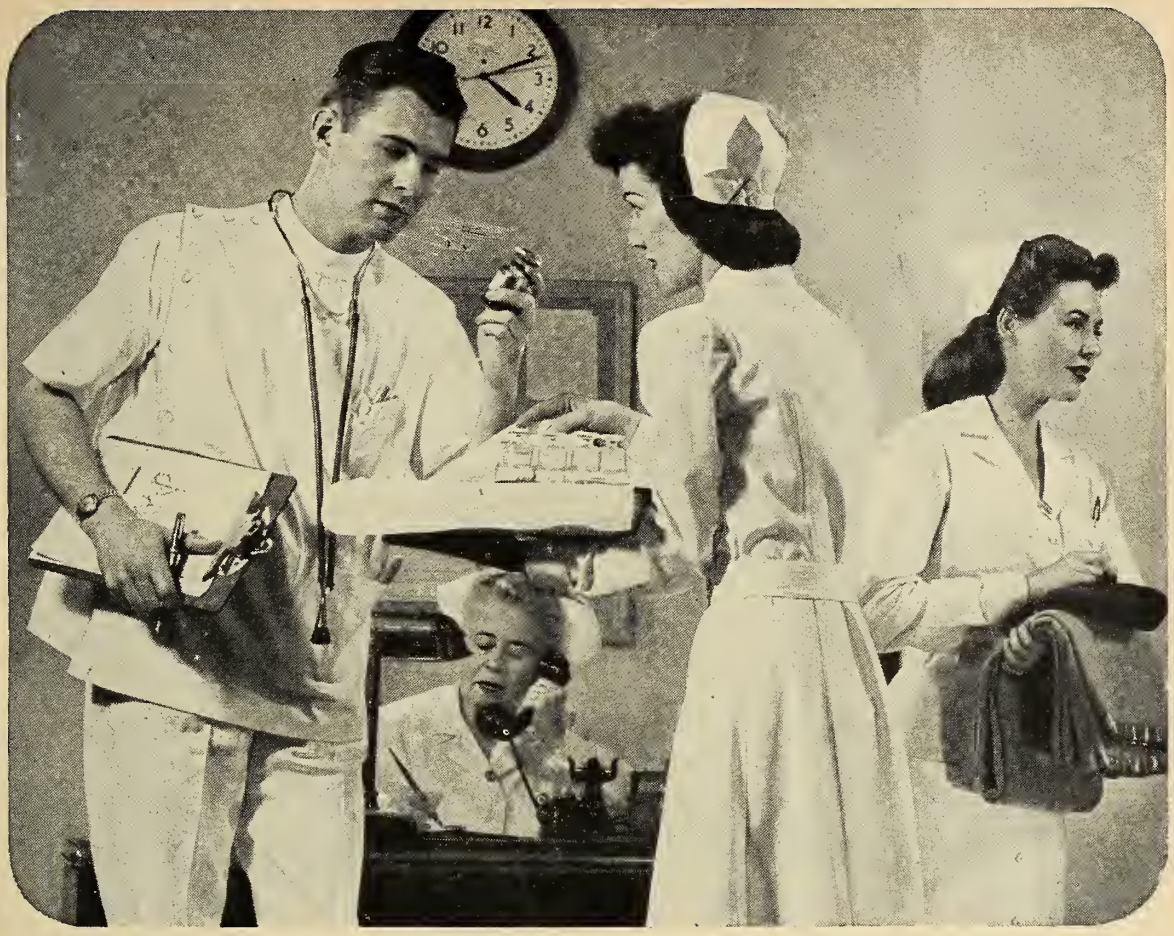
The need to build up the Michigan Foundation for Medical and Health Education by contributions from Doctors of Medicine—to prove that medical men favor their own medical and health education fund—was obvious to the 1946 House of Delegates which adopted the above recommendation of the Council. Meanwhile the Foundation's Board of Trustees has developed a descriptive brochure to aid in this meritorious work. The attention of every member of the Michigan State Medical Society is earnestly invited to the need for, interest in, and co-operation with, the above recommendation of the MSMS Council.

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He has his textbook education . . . his doctor's degree. But, in return for the privilege of working side by side with the masters of his profession, he will spend a year—more likely two—as an active member of a hospital staff.

His hours are long and arduous . . . his duties exacting. But when he finally hangs out his coveted shingle in private practice he will be *a doctor with experience!*





According to a recent independent nationwide survey:

More Doctors Smoke Camels

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Political Medicine

WAGNER, MURRAY, DINGELL BILLS

Senator Murray, in his published comments on the bill which bears his name, states that one of the pressing reasons for this particular bill is because the indigent are dying without proper medical care. That is another statement that could be very well refuted. The indigent in large cities receive care which is comparable to that which may be given to a millionaire. Certainly in the rural sections, at least in Louisiana, the indigent are being treated at our big state hospitals by outstanding members of the medical profession. They receive medical care and attention which is notable. With good roads and the easy accessiblity to even the most remote country districts, it is possible to get a patient, for example, in a charity hospital within a very few hours. Furthermore, the smaller state hospitals are wont to refer their difficult diagnostic and therapeutic cases to the two big state hospitals which, in equipment, lack nothing and whose medical personnel is highly skilled. If these revolutionary bills should be passed it is certainly not for the benefit of the extremely poor.

It is difficult indeed for any physician or any intelligent layman to understand why medical services which are acknowledged to be the best in the world should suffer by the tremendous upheaval and disturbance in medical practice which the passage of the Wagner-Murray-Dingell Bill is bound to occasion.—Editorial, *New Orleans Medical and Surgical Journal,* August, 1946.

MEDICINE'S NATIONAL HEALTH PROGRAM

1. Minimum standards of nutrition, housing, clothing and recreation are fundamental to good health.

2. Preventive medical services should be available to all and should be rendered through professionally competent health departments. Medical care to those unable to provide for themselves should be administered by local and private agencies with the aid of public funds when needed, preferably by a physician of the patient's choice.

3. Adequate prenatal and maternity care should be made available to all mothers. Public funds when needed should be administered by local and private agencies.

4. Every child should have proper attention, including scientific nutrition, immunization and other services included in infant welfare. Such services are best supplied by personal contact between the mother and the individual physician but may be provided through child health centers administered locally with support by tax funds whenever the need can be shown.

5. Health and diagnostic centers and hospitals necessary to community needs are preferably supplied by local agencies. When such facilities are unavailable, aid may be provided by federal funds under a plan similar to the provisions of the Hill-Burton Bill.

6. Voluntary health insurance for hospitalization and medical care is approved, the principles of such insurance plans to be acceptable to the Council on Medical Service and to authoritative bodies of state medical associations.

7. Medical care, including hospitalization, to all veterans should be provided preferably by a physician of the veteran's choice, with payment through a plan agreed on between the state medical association and the Veterans Administration.

8. Research for the advancement of medical science, including a National Science Fundation, is endorsed.

9. Services rendered by volunteer philanthropic health agencies should be encouraged.

10. Widespread education in the field of health, and the widest possible dissemination of information regarding the prevention of disease and its treatment, are necessary functions of all departments of public health, medical associations and school authorities.—Council on Medical Services, July 26, 1946.

DIVISION OF HOSPITAL FACILITIES

Formation of a Division of Hospital Facilities to assist Surgeon General Thomas Parran in carrying out the provisions of the Hospital Survey and Construction act has been announced by the United States Public Health Service.

This division will absorb the functions of the Hospital Facilities Section of the States Relations Division,

(Continued on Page 1302)

The Cosmetic Effect OF OPTICAL DESIGN



In fitting the woman patient to her satisfaction—and yours—the cosmetic effect of optical design is particularly important. For today, women demand not only visual efficiency but style as well. As an example, the Uhlemann Fantashape worn here is particularly suitable for the square-face type. It adds breadth and flatness at the top to emphasize the width between the eyes and the narrowness at the bottom tends to minimize the fleshiness of the lower half of the face. Fantashape is available in rimless or shell . . . to suit the most exacting patient.

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DIVISION OF HOSPITAL FACILITIES

(Continued from Page 1300)

Bureau of State Services which was abolished simultaneously with the creation of the Division of Hospital Facilities.

Headed by Medical Director Vane M. Hoge, the newly formed division of the Bureau of State Services will be responsible for carrying out the functions which the U. S. Public Health Service is authorized to perform in accordance with the provisions of the act. This will include assistance to the states, their political subdivisions, and nonprofit organizations in matters relating to the study, construction and operation of hospitals. The Division will also assist the Surgeon General in preparing regulations, determining allotments and grants and considering applications, plans and projects.

HOSPITAL ALLOTMENT FIGURES

Allotment figures to the states for the five-year hospital construction program authorized in the Hospital Survey and Construction act (Public Law 725) were released today by Surgeon General Thomas Parran of the United States Public Health Service. The act authorizes the appropriation of $3,000,000 for state-wide hospital surveys and for planning of construction programs, and $75,000,000 annually for five years for the actual construction of hospitals and related facilities.

Of these amounts authorized, only $2,350,000 has been appropriated to date. This is earmarked for assistance to states in surveying and planning and for administrative expenses of the U. S. Public Health Service in connection with this program.

The share to which each state is entitled from the $3,000,000 authorization for survey and planning expenses is based solely on state population. For determination of the distribution of the $75,000,000 authorized for construction, a formula is used which takes into consideration both the population and the per capita income of each state.

The allotments to the several states based on appropriations authorized in the act are contingent upon Department of Commerce certification of population data.

The allotment for Michigan for survey and planning is $124,372, and for construction, $2,172,000.

SIDE-DOOR APPROACH

State health insurance is in a fair way to being introduced in this country by flank attack. While attention is directed at the well-publicized Wagner-Murray-Dingell Bill in Congress, which has not made headway, some of its purposes are being accomplished by side-door entrances, and if this keeps up the W-M-D Bill advocates may before long be in a position to tell their adversaries to turn around and see that the goblins are already here.

There are, for instance, the amendments to the railroad unemployment compensation act that provides $25 a week for twenty-six weeks to railroad workers and employes in allied lines for unemployment occasioned by accident or sickness. This bill, regarded as a cold potato, was enacted in surprising fashion in the closing days of the seventy-ninth Congress by skillful maneuvering on the part of Senate majority leader Barkley.

Then there was the amendment to the Social Security Act, also getting by at the last moment without fanfare, that provides for the turning over of accumulated taxes paid by employes for unemployment insurance to those states that enact unemployment disability compensation measures. California and Rhode Island already have such plans. This is an invitation to New Jersey and Alabama to follow suit, as they are the other two states that currently tax employe as well as employer for unemployment insurance. If those two states do so, it will mean that in four states there will be a form of state health insurance. That will comprise much potential pressure on other states to set up something similar. The snowball will be started downhill.

Then there was the amendment to the National Service Life Insurance act, another last-minute enactment, permitting veterans to add disability insurance to their government life insurance in the amount of $5 per month benefit per $1,000 of life insurance.

Veterans administration, it is said, was opposed to this departure but gave in to the various veterans organizations that have been pressing for many liberalizing features.

The citizenry in general is not cognizant of these piecemeal approaches to state health insurance. Even the rank and file of railroad men didn't know what was being handed to them in this direction.

When it comes to meeting squarely the issue of state health insurance as presented by the Wagner-Murray-Dingell Bill, the people through Congress have not given an affirmative answer. This is a battle that should be fought in the open, with full publicity and argument. The country should not unwittingly become immersed by degrees in such a system. At least it should be apprised of the significance of these piecemeal steps that are being taken and where they may lead.

—From the *National Underwriter,*
August 16, 1946.

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. . . your arthritic patient receives the preparation that is . . .

. . . THERAPEUTICALLY EFFECTIVE
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For more than twelve years Ertron—Steroid Complex, Whittier—has been the subject of research in leading hospital and university clinics and in private practice.

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Laboratory studies over a five year period prove that Ertron—Steroid Complex, Whittier—contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure form establish the chemical uniqueness and steroid complex characteristics of Ertron.

Physician control of the arthritic patient is essential for optimum response. When the results attainable through steroid therapy in arthritis are desired, it is important to *prescribe* Ertron, as it is made available to the patient only upon *written prescription.*

Each capsule of Ertron—Steroid Complex, Whittier—contains 5 milligrams of activation-products (produced by electrical activation of heat-vaporized ergosterol—Whittier Process). Biologically standardized to an antirachitic activity of fifty thousand U.S.P. Units.

Ertron is the registered trademark of Nutrition Research Laboratories

NUTRITION RESEARCH LABORATORIES, CHICAGO

You and Your Business

1947 MSMS ANNUAL SESSION

Grand Rapids has been chosen as the site of the 1947 annual session of the Michigan State Medical Society. The dates selected are September 21-26.

Plans for an excellent scientific assembly, with eleven section meetings and both scientific and technical exhibits are already under way.

The annual poll of the membership, to aid the Committee on Scientific Work in selecting the most outstanding clinicians and lecturers in North America for the program of the annual session, will be made early in January.

Thirty guest speakers will be on the program of the 1947 annual session.

"HOME TOWN DENTAL CARE" FOR VETERANS

Veterans with service-connected dental conditions may now have a "free choice" of private dentists in Michigan when V.A. dental clinic service is not "feasibly available," under a new fee schedule program worked out in co-operation with the American Dental Association and the Michigan State Dental Society. Local "participating dentists on a fee basis," as they are called, will supply the service.

There were 80,133 patients in V.A. hospitals on August 29, Veterans Administration announced. More than 26,000 veterans were hospitalized because of service-connected disorders, and approximately 54,000 of them had non-service-connected disorders, the report stated. It also showed that 11,721 veterans were in non-V.A. hospitals, and that 3,712 of them suffered from service-connected disorders.

The veteran population of the United States on August 31 was 17,499,000, according to a Veterans Administration report.

The report revealed that there were about 13,538,000 World War II veterans and approximately 3,961,000 veterans of World War I and other wars.

MSMS PUBLIC RELATIONS PLAN

The "Public Relations Plan" of the Michigan State Medical Society is in the hands of all members. This "P.R.P." is unique in that it is the first published book which puts on paper a comprehensive plan for the implementation of a state-wide effort in medical public relations.

Those who have read the book will note that it is not a compendium of flattering facts and complimentary comments designed to make doctors of medicine feel secure in the fact that they have an active and intelligent leadership and that "everything is going nicely if you just let us do the work." *It is instead a work book.* It is a book indicative of the preparatory thought, the experiments, the creeds, the techniques of a state society that is buckling down to the job of selling the public on the idea that doctors of medicine, individually and as an organization, actually do have the public interest at heart. The plan proves that, quite in contrast to certain other organizations, the purposes of our physicians are altruistic, their pledge is an earnest endeavor to provide a wide distribution of quality medical care at fair and equitable fees, and that their society offers co-operation with every other organization with similar ideals and objectives.

INTERNATIONAL COLLEGE OF SURGEONS

Surgeons gathered in Detroit from the earth's four corners in the 11th Assembly and Convocation of the United States Chapter, International College of Surgeons, October 21, 22, 23, 1946.

Prominent among the lay guest speakers was Joseph C. Crew, former ambassador to Japan, who discussed "The Preservation of International Peace" at the Convocation in the Masonic Temple on Tuesday night, October 22. Fleet Admiral Chester W. Nimitz was the principal speaker at the banquet on Wednesday night. Others on the banquet program included Ross T. McIntire, M.D., Surgeon General of the Navy, and Morris Fishbein, M.D., editor of the JAMA.

The evening of the opening day of the convention was given over to a Michigan-Wayne County-Detroit Night at which a Symposium on Thyroid was presented.

An unusually large attendance (2,300 registration) was attracted by the wealth of talented guest essayists on the program. Such figures as Hamilton Bailey, M.D., London, England; Professor Jacob Bitschai, M.D., Alexandria, Egypt; W. Wayne Babcock, M.D., Philadelphia; Max Thorek, M.D., Chicago; Roland Klemme, M.D., St. Louis, Mo., were among those presenting outstanding papers on modern surgery.

Herbert Acuff, M.D., Knoxville, Tennessee, was re-elected President, Custis Lee Hall, M.D., Washington, D. C., President-Elect and Louis J. Gariepy, M.D., Detroit, Secretary. Dr. Gariepy in addition to being Secretary of the United States Chapter was also General Chairman of the convention.

IDWTGTRMB CLUB

Why do people who know the ABC's of Public Relations like the IDWTGTRMB Club? Because it expresses a policy, a prayer and a point. The founders have hit upon an idea that bespeaks the feeling of all who believe in private enterprise and are opposed to the ever-increasing encroachment of collectivism disguised under the misnomer "social progress." Business and professions far removed from medicine, but feeling a unity in the ever-continuing fight to keep America free, have adopted the IDWTGTRMB Club as their own. The novel idea is spreading nationwide. It is a simple, direct and final answer to Wagner-Murray-Dingell Bills and their ilk,

(Continued on Page 1310)

striking evidence of nutritional abnormalities...*

Vitamin B COMPLEX

Thiamine, Riboflavin, Pyridoxine, Calcium Pantothenate. That relatively large amounts of the B complex vitamins are required in the treatment of chronic arthritis has been reported by many rheumatologists. Characteristic B complex deficiency symptoms frequently encountered in arthritic patients not only unfavorably affect the course of the arthritic process, but also add to the discomfort typical of the syndrome.

Vitamin C

In patients with chronic arthritis the requirement of vitamin C is greatly increased. Abnormally low blood levels of vitamin C have been observed frequently in arthritic patients.

Vitamin E

Beneficial results have been obtained with vitamin E when fibrositis complicates the arthritic involvement. Since involvement of the soft tissue is almost the rule in arthritis, vitamin E finds a rightful place in the management of these patients. Vitamin E is known to be involved in the metabolism of skeletal muscle.

DARTHRONOL

Darthronol presents—in one capsule and in correlated indicated potencies—these nine vitamins which many investigators assert play an important role in the management of the arthritic patient.

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Say you saw it in the Journal of the Michigan State Medical Society

IDWTGTRMB CLUB

(Continued from Page 1306)

for it says, in effect, "I Don't Want The Government To Run My Business, because more progress can be made and happiness will be gained, if I, a doctor of medicine, who have made a life-long preparation for this task, am allowed the freedom to improve scientific medicine and its distribution to all men through voluntary means."

MILITARY SURGEONS MEET IN DETROIT

The Association of Military Surgeons held its annual meeting in Detroit, Michigan, October 9, 10, 11, 1946, and had a large registration.

Scientific general meetings were held each day, bringing out the latest in medical knowledge as developed during the war, particularly as to how this military knowledge is applicable to civilian practice. In addition, there were section meetings of the various specialties and the co-ordinating services of the Medical Corps, such as Dental, Sanitary, Nursing and Veterinary Corps.

The banquet was held the evening of October 9 at which were present Surgeon General Kirk of the army, Surgeon General McIntire of the navy, Surgeon General Parran of the Public Health Service, and General Hawley, Medical Director of the Veterans Bureau, and General Smith of the Dental Corps of the army. The evening of October 10 was designated as a fun and frolic meeting, a sociable get-together meeting of Medical Corps veterans.

Present at the meeting were the surgeon generals of Great Britain, Netherlands, Netherlands East Indies, Spain, Belgium, Poland, Sweden, Denmark, Nicaragua, Australia, New Zealand, British South Africa and Canada. These made the meeting a truly international event.

Scientific exhibits were shown by the army and navy among others, and a large commercial exhibit was on hand.

HALF FAVOR MEDICAL-PAYMENT HELP

The following question was asked the farm group, and answers are tabulated:

What do you think should be done, if anything, to provide for the payment of doctor, dentist and hospital bills for people in this country?

PLAN	
Voluntary health insurance, Blue Cross co-operative organization, hospitalization	21%
GOVERNMENT	
Government aid for medical care for needy	7
Socialized medicine under the head of Social Security	4
Federal government-supported hospitals and clinics	2
Government hospital insurance	1
CHARITY	
Private charity and agencies	4
Community Fund	1
More free hospitals and free clinics and free care (private or public unspecified)	1
MISCELLANEOUS	
Deductions from workers' pay	6
National health program	2
State and local government-supported hospitals and clinics	1
Special plan for veterans	1
Miscellaneous	1
NOTHING, NO SUGGESTION	
Nothing	37
No opinion, don't know	9
Something should be done—no suggestion	3
	101%*

*Percentages add to more than 100 because some respondents gave more than one answer.

—From *Successful Farming*, July, 1946

MICHIGAN HOSPITAL SURVEY REPORT, 1946

The Michigan Hospital Survey Study Committee has made its report. This study was financed by the W. K. Kellogg Foundation, of Battle Creek, the Commonwealth Fund and the National Foundation for Infantile Paralysis.

As a result of this study it is recommended in general:

1. That the general hospital should not limit admissions to the one primary type of cases, and that it should provide essential service necessary for the care of types of patients who are admitted.

2. That general hospitals, whenever possible, provide for the care of communicable disease, certain types of cases of tuberculosis, nervous and mental diseases, chronic diseases, and convalescent patients.

3. That the general hospital should be organized as the focal point through which the health services of the community are integrated.

4. That an integrated program should be established between the general hospital, tuberculosis sanatoria, nervous and mental disease hospitals and institutions for chronic and convalescent patients, to the end that the scientific equipment and professional personnel in the general hospital may be used to assist in the care of patients in those institutions.

5. That government units use voluntary general hospital facilities for the care of medically indigent patients as far as possible and provide a method for the equitable remuneration of general hospitals for services to those patients.

It is also suggested:

1. That general hospitals provide physical facilities for all services necessary for the treatment of communicable diseases.

2. That special contagious disease hospitals now operated by counties, cities, and villages be discontinued or that their function be expanded to include all types of illness.

3. That a means be developed whereby the care of these patients now financed from tax funds could be subsidized in general hospitals.

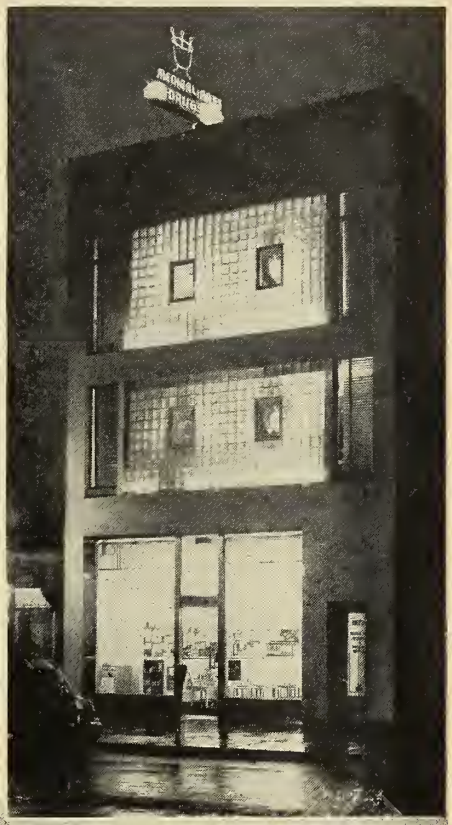
(Continued on Page 1362)

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Medical Arts Pharmacy represents the achievement, through the physician's co-operation, of one of the finest and most modern of professional prescription pharmacies in Michigan. Established in 1936 it has had a phenomenal growth through strict adherence to the highest of ethics. *"Nothing Sold Without a Doctor's Prescription"* has been the policy since the inception of Medical Arts Pharmacy and it continues to be rigidly maintained to this day.

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War Medicine

SECRETARY OF WAR APPOINTS MEDICAL ADVISORY COMMITTEE

Secretary of War Robert P. Patterson recently announced appointment of a medical advisory committee to the Secretary of War, to maintain and foster close relations between civilian and army medicine, and to enable the army to receive advice on army medical organization and policies from leaders in civilian medicine.

Members of the new committee are: Dr. Edward D. Churchill of Boston, chairman; Dr. Elliott Cutler, Moseley professor of surgery at Harvard University; Dr. Michael DeBakey of the Tulane University Medical School; Dr. Eli Ginsberg of Columbia University; Dr. William C. Menninger, director of the Menninger Clinic, Topeka, Kansas; Dr. Hugh J. Morgan, professor of medicine, Vanderbilt University Medical School, and Dr. Maurice C. Pincoffs, professor of medicine, University of Maryland.

All members of the committee served with the Medical Department of the army during the war, either as officers or in a civilian capacity, and are intimately familiar with army medicine. Dr. Churchill, the chairman, was the army's consultant in surgery in the Mediterranean Theater. He is professor of surgery at Harvard Medical School and president of the American Surgical Association.

During the war, more than 95 per cent of army doctors were drawn from civilian medicine. Most of these, except recent graduates of the Army Specialized Training Program, have been released from the army and have returned to their civilian practices.

Major General Norman T. Kirk, Surgeon General of the army, previously has announced a policy under which distinguished civilian doctors will serve as consultants in their respective specialties in army general hospitals.

FIRST SHIPMENT OF RADIOISOTOPES FROM MANHATTAN PROJECT

New horizons of medical and biological research were opened when the Manhattan Engineer District, key organization in the development of the atomic bomb, delivered the first radio-active isotopes to the nation's research institutions.

First peacetime products of the government's huge atomic energy facilities were pea-sized units of Carbon 14, which for the next 10,000 to 25,000 years will emit 37 million beta particles per second, and will be used in research in connection with cancer, diabetes, photosynthesis, carbon deposition in the teeth and bones and in the utilization of fats by the human body.

Barnard Free Skin and Cancer Hospital of Saint Louis received the first unit for study of the processes by which cancer is produced. The hospital's application was the first cleared through the necessarily elaborate distribution procedure.

Created in the chain-reacting uranium pile of Clinton Laboratories, the atomic research center operated for the government by Monsanto Chemical Company, the unit of Carbon 14 obtained by the hospital weighed only about one ten-thousandth of an ounce. Its half-life is estimated at 10,000 to 25,000 years; in other words, starting with the year 11,946 A.D. the unit (if kept intact) should still be giving out beta particles at an average rate of 18½ million particles per second. During the elapsed time 10 billion particles will have been emitted.

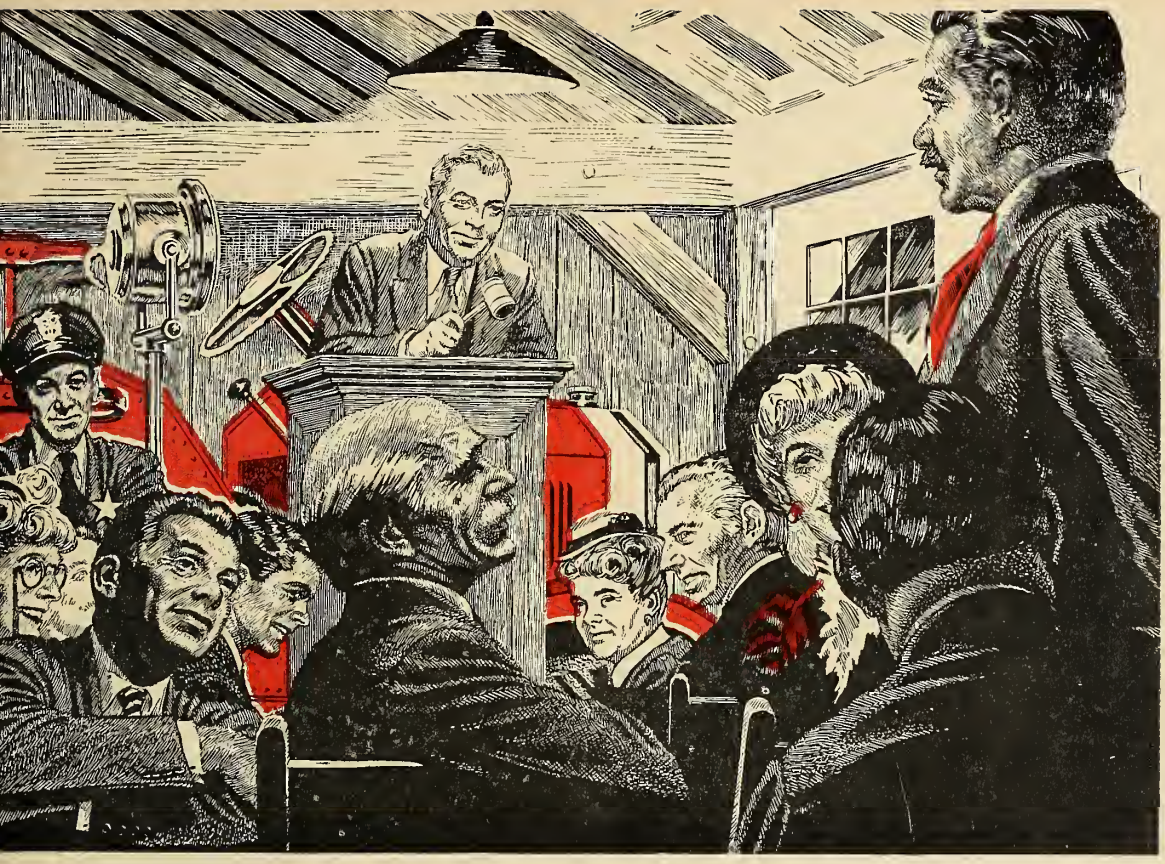
Yet despite its small physical size, the unit of Carbon 14 for Barnard Hospital represents from 100 to 1,000 times as much of the isotopes as heretofore made available to research in any single cyclotron-produced order. The unit was priced at $367, the actual estimated cost of production, plus handling and shipping charges, with the total cost to the hospital of about $400.

Dr. E. V. Cowdry and Dr. William L. Simpson, research director and associate research director of the hospital, respectively, received the millicurie of Carbon 14 (one millicurie is that amount of radio-active material which emits 37 million disintegration particles per second).

Hundreds of applications for radio-active isotopes, including not only Carbon 14 but also many other of the fifty-odd varieties producible at the Clinton Pile, have been received from the nation's leading research laboratories. From thirty to forty orders will be filled within the immediate future, and several hundred additional orders are likely to be filled within the next few months. Requests for radio-elements thus far received suggest widely divergent fields of scientific interest. These include the study of:

1. Mechanisms by which cancer is produced.
2. Mechanisms by which plants utilize sunlight and carbon dioxide.
3. Disfunction of the thyroid glands.
4. Growth and composition of teeth and bones.
5. Utilization of sugar in diabetes.
6. Utilization of all essential food components.
7. The turn-over of iron in anemic conditions.
8. Absorption by plants of essential elements from soil.
9. Vulcanization and polymerization of rubber.
10. Problems associated with radio-active isotopes themselves.

(Continued on Page 1316)



Truly, this is America . . . Town Meeting

It's no accident that the most typical of our institutions is also one of the oldest . . . and ablest.

"THE MEETING will please come to order."

In town meeting nobody talks just to hear the sound of his own voice. Conviction is carried by faith and sincerity.

Because such meetings are so utterly American, they typify qualities most deeply ingrained in our national character . . . freedom of the individual . . . reverence for skill and accomplishment . . . the awe akin to worship that surrounds—for example—the community physician.

It is he who brings the best thinking of the medical profession, the newest findings of the laboratory technicians, to bear on the health problems of the individual . . . he who utilizes the most valuable contributions to medical knowledge from all over the world.

There may be higher offices than that of doctor. But there is no position of greater trust . . . no career which demands more of the individual, the unfettered but trained mind. And it is as completely free individuals that our men of medicine have made their world mark.

IN NEW JERSEY there's a typically inviting community where many of the medical profession's fine pharmaceuticals are produced in the laboratories of Ciba . . . where Ciba's own medical researchers hunt relentlessly for improved aids to the family physician.



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SUMMIT NEW JERSEY

Say you saw it in the Journal of the Michigan State Medical Society

MEDICAL SCHOOL GRADUATES OFFERED RESERVE COMMISSIONS, INTERNSHIPS

Major General Norman T. Kirk, the army Surgeon General, announced that there are eighty-three first lieutenant reserve commissions available for 1947 medical school graduates who desire internships in army hospitals.

Along with the commission goes an annual salary of $3,404 if the officer has dependents. If he has no dependents, he will receive $2,972 a year. These figures include a rental allowance of $60 monthly where government quarters are not furnished.

The commissions represent an unprecedented departure from former army practice when interns were classified as civilian employes and received about $1,000 annually while completing their fifth or clinical year of study. With some 90,000 patients in army hospitals the world over and prospects of a large peacetime army, the army Medical Department is seeking young doctors interested in a career in military medicine.

In the event that a man who receives a reserve commission does not elect to remain in the army following his internship or does not develop to meet requirements for army doctors, his training will not be lost. This internship, the conventional rotating type, is recognized by the Council on Medical Education and Hospitals of the American Medical Association and by State Boards of Registration. They require the clinical year of training before granting a license to practice.

In notifying deans of accredited medical schools of the plan, the Surgeon General asked that they recommend men, not only desirable as interns, but who will ultimately develop as regular army medical officers. A professional examination will not be required before the internship is accepted.

Applications may be submitted by students through the deans of their respective schools. Each applicant who qualifies will be notified. Application blanks may be obtained from the deans of medical schools.

Each applicant must be a United States citizen, a prospective 1947 graduate of a recognized school of medicine approved by the Council on Medical Education and Hospitals, must be not over thirty years of age on July 1, 1947, have no commitment to accept an internship appointment in any other institution and meet physical standards for appointment in the Medical Corps, U. S. Army. Physical qualifications are printed in Army Regulation 40-105.

Michigan Foundation Pledge Card

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I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION
2020 Olds Tower, Lansing 8, Michigan, for the twelve-month period beginning September 19, 1945, the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
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My contribution is

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(1) In Cash ☐ to be paid in the total sum ☐ or in annual payments of $.....

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or **(3) In Life Insurance** ☐

or **(4) As a Memorial** ☐ to the memory of:

.....

or **(5) In my Will** ☐

SIGNATURE .....

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

VOLUME 45 OCTOBER, 1946 NUMBER 10

Medical Implications of Atomic Energy

By Fred Jenner Hodges, B.S., M.D.



In so far as our earth is concerned, atomic energy has remained locked in the inner structure of matter since that remote occasion some three billion years ago when, through the gravitational pull of a passing star, a part of the sun's vaporous substance was detached and hurtled into space. With relative speed that small bit of the sun which we today inhabit condensed, as it cooled, changing as it did so from gaseous to liquid and finally to solid form. Except for a very few substances which occur in such small and highly diluted deposits that their existence was unknown until fifty years ago, the earth is known to consist of highly stable, virtually immutable materials called the chemical elements. Of the ninety-two such elements identified prior to 1942 only three of the very heaviest, uranium, actinium and thorium, possess the ability to undergo spontaneous disintegration, known as the property of natural radioactivity.

With the exception of its incandescent outer atmospheric layer the sun is composed of material which is by no means stable. Instead of a fixed series of elements the gigantic mass of its photosphere is made up of the composite parts of atoms, those nuclear particles which can be grouped to produce the substances which are known to us as the ninety-two elements of the periodic table. The energies of these particles in uncombined state are enormous and the sum total of those energies imparts to our sun its tremendous mean temperature of 6000 degrees centigrade. The computed temperature at the sun's center is in the neighborhood of 30 to 60 million degrees centigrade. In the process of compressing the precursors of elements into the stable forms which are found in the substance of our earth and in its surrounding atmosphere, great energies are stored, energies of such magnitude that comparison with man-made power almost defies the imagination.

Understanding of the puzzling phenomena exhibited by naturally occurring atomic disintegration has occupied the attention of a number of inquisitive investigators since 1896, when Becquerel in France first observed that particles identical with the nuclei of helium atoms were spontaneously ejected from uranium ores. Becquerel's discovery, followed closely by the isolation of radium by Marie and Pierre Curie in 1898, was preceded a few months by Roentgen's discovery of x-rays. These three scientific contributions have been indelibly interwoven with our present-day conceptions regarding the structure of the universe. The profession of medicine has been enormously affected by the unfolding of knowledge regarding the composition of the atom, and further modification of medical thought and practice will certainly follow more recently learned physical facts.

The origin of the energy locked in the nuclei of atoms is as old as the earth itself. Medicine had its beginning countless centuries later when it emerged from the superstitious lore of pre-

From the Department of Roentgenology, University of Michigan. Presented at the twelfth annual clinic of the Ingham County Medical Society at Lansing, Michigan, May 2, 1946, and repeated as the Class Day address, University of Wisconsin School of Medicine, May 10, 1946.

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historic tribes of men. Our profession made its lumbering and halting way through vicissitudes of witchcraft, mythology, religious faith, empiri-

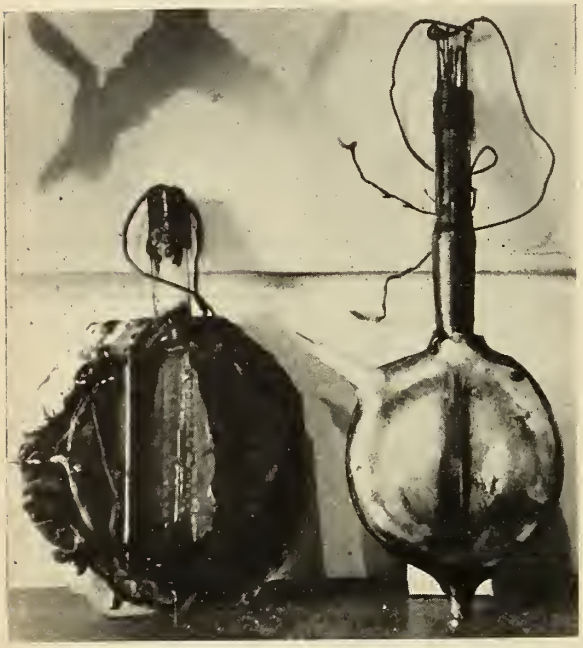


Fig. 1. Earliest experimental cyclotron chambers.

cism, and at long last the age of experimentation, reaching a level of very considerable efficacy in ministering to mankind before the secret of releasing the long latent energy stored in atoms was discovered. Only in the last half century of its some twenty thousand years of development has medicine been aided in any part by the forces derived from atomic disintegration. During that brief period medicine has made long and important strides many of which stem directly from the lessons derived from the discoveries of Roentgen, Bequerel and the Curies.

Five epochal contributions to medicine, spaced over two centuries of time, represent the beginnings of physical diagnosis as we know it today. In 1628 Harvey first described the circulation of the blood. Van Leeuwenhoek introduced microscopy in 1670. In 1761 Auenbrugger fathered percussion, and the stethoscope was placed in the hands of physicians by Laennec in 1819. The ophthalmoscope, first of a long succession of instruments for direct visual diagnosis, was produced in 1851 by Helmholtz. In contrast to this slow rate of progress, as judged by the tempo of our recent medical developments, the discovery of x-rays in the early winter of 1895 gave birth to a unique system of physical diagnosis which promised to carry "inspection" far beneath mere surface markings and threatened to challenge the supremacy of "percussion" and "auscultation" in the matter of determining the compactness of deeply situated tissues and organs. Within three decades, diagnostic roentgenology had become established as a vigorous and well-respected medical specialty. Thirty-nine years after Roentgen's discovery, American physicians who were especially trained in the new diagnostic method were being certified by a specialty board in radiology.

Somewhat more slowly, yet rapidly in comparison to the progress of medicine in the preceding century, the biological effects of x-rays and the spontaneous radiations from radium were studied and found to have a place in medical practice. The virtues of radiation therapy in effecting the alleviation of intractable pain, in the control of many skin eruptions, in the abortion of violent suppurative lesions, and above all else as a weapon against malignant tumors, are now well established. The therapeutic phase of radiology continues to grow rapidly in stature as an important subdivision of medicine.

Knowledge concerning the inner structure of the atoms of which all matter is composed has been expanded with breath-taking speed since 1934 when the Curie-Joliots in Paris reported that, upon bombarding light elements such as boron, magnesium and aluminum with alpha particles derived from the emanation of radium, they had observed continuing radioactivity in these formerly stable and inactive substances. Their work had been preceded by important researches by Rutherford in England and by Bothe and Becker in Germany who had been studying the particles emitted by various substances exposed to bombardment by fast moving particulate radiations from natural sources. Until 1934 no one had succeeded in producing artificial radioactivity in normally stable substances. At once, a great many investigators, Bohr of Denmark, Fermi of Italy, Cockcroft and Walton of England, Anderson of the California Institute of Technology in this country, to mention but a few, sensing the enormous importance of the new discovery, began the intriguing exploration of the field of nuclear research.

Limited at first to the naturally occurring emis-

sions from radioactive elements as a source of bombarding particles with which to disrupt the elements of lesser mass, physicists soon found means of accelerating free atomic particles to act as effective projectiles with which to violate the sanctity of atomic nuclei. High energy-generating apparatus employing high-tension transformers and rectifiers capable of accelerating particles to sufficient speeds were difficult to construct and to operate. Machines of the Van de Graaff type, which collect electrical charges by friction and store them in condensers until high voltages are attained, were found to be more practical. Linear resonance accelerators employing the principle of applying repeated thrusts of energy to particles already in motion were developed in Germany and were subsequently built on larger scale by Lawrence and Livingston in this country. These later workers developed the scheme conceived by Lawrence, whereby free moving electrically charged particles were repeatedly accelerated along their curved course of travel within a

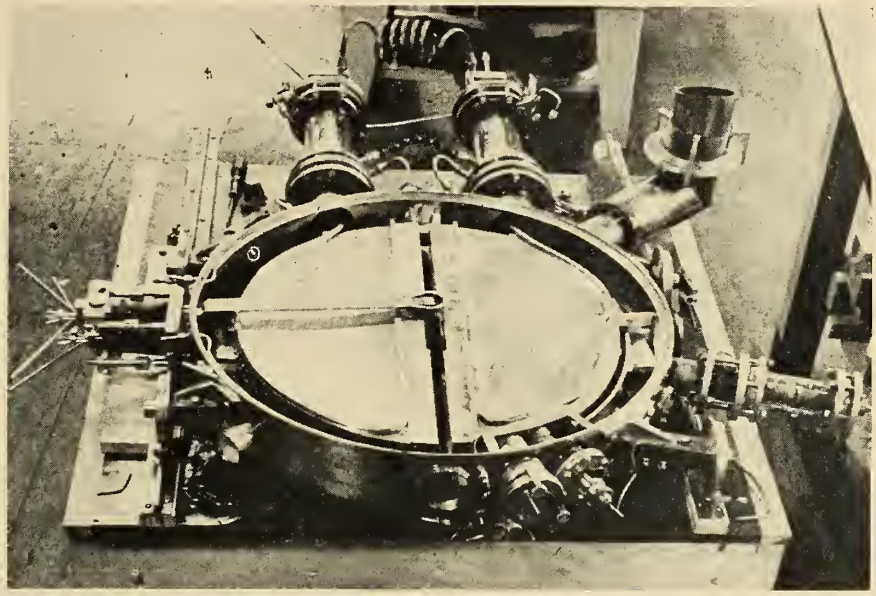


Fig. 2. Vacuum chamber of the first of the large cyclotrons.

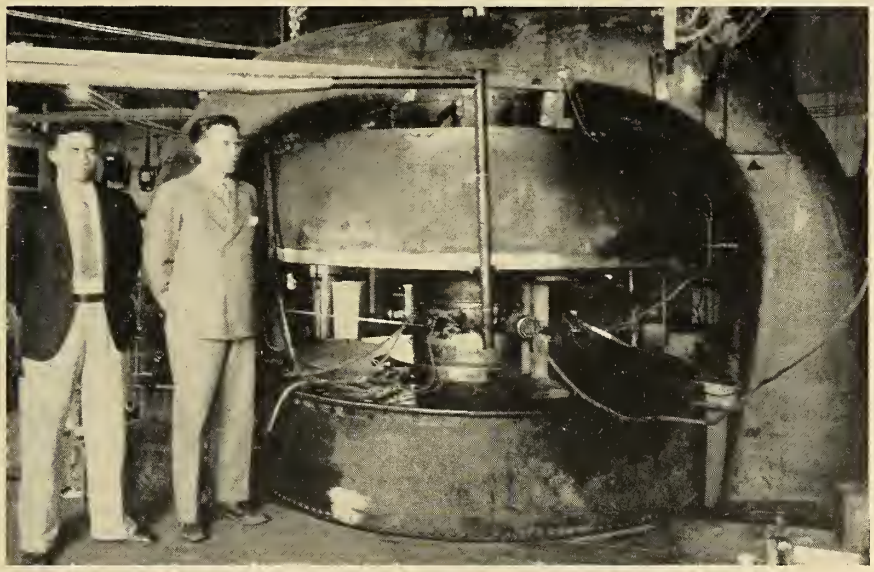


Fig. 3. Livingstone and Lawrence with the four million volt cyclotron at Berkeley, California.

powerful magnetic field by the impulses of a high frequency oscillating circuit. This instrument, the cyclotron, proved to be an effective and thoroughly practicable instrument for obtaining a bombarding beam of sufficient energy and magnitude to produce artificial radioactive materials in hitherto unobtainable quantities. This contribution brought fitting recognition to Lawrence in the form of the Nobel award in physics which had been won in turn by so many of the pioneers in radiation physics beginning with Roentgen. The story of the cyclotron's development is an extremely interesting one, well illustrated by Figures 1, 2, 3, 4, and 5.

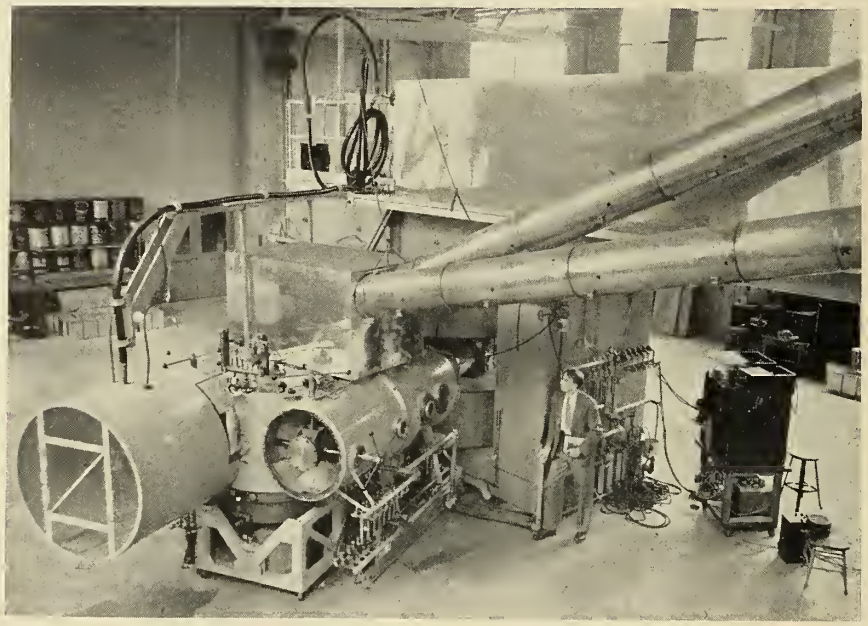


Fig. 4. Overall view of cyclotron built for biologic research.

In rapid succession Lawrence and his associates constructed one cyclotron after another, each more powerful and more versatile than its precursor. At other institutions throughout the world similar instruments were constructed and the exploration of the inner atom progressed with growing momentum. War clouds over Europe and Asia and characteristic American enthusiasm, coupled with the wealth and resources of our country, gave the United States an early lead in the race to exploit the new field of experimentation, a state of affairs which subsequent events have shown to be of enormous national importance.

At Berkeley, California, a fabulous array of research talent attached itself to Lawrence's laboratory. Of particular interest to us as physicians, a cyclotron was constructed capable of imparting to the nuclei of deuterium, the isotope of hydrogen found in heavy water which had been discovered by Urey in 1932, energies of 16 million electron volts. The Crocker Laboratory was built to facilitate biophysical research in the field of nuclear physics. In early 1940 there began at this station an intensive period of investigation involving every conceivable aspect of biology, only to be interrupted shortly after the event at Pearl Harbor when, like so many civilian activities, nuclear physical research was drafted for the business of war.

Prophetic achievements affecting medicine in the antebellum period fall into three categories:

1. The development of new isotopes of normally occurring elements which, by virtue of their artificially acquired radioactivity, can be used as "tagged" or "tracer" substances in the study of chemistry and metabolism.

2. The use of such isotopes to bring about the biological changes produced by radiant energy within individual cells capable of imbibing them, instead of inducing such tissue effects by externally applied radiations.

3. The trial of forms of particulate radiation

of fantastic energy as substitutes for x-rays and radium.

In all three directions great strides were made before it became necessary to postpone further peacetime investigations. Mobilized for the war effort, physicists, chemists, engineers, physicians, biologists, mathematicians, and the machines of nuclear physics distinguished themselves by producing the number one secret weapon which rendered the invasion of Japan unnecessary and materially shortened the conflict. An unprecedented concentration of intellect, drafted from the laboratories of the United Nations and from among the army of brilliant scientists whose ancestry made them undesirables in the totalitarian countries, coupled with the vast material and labor resources of this country, resulted in the practical harnessing of the phenomenal power which is released when the complicated nucleus of uranium^{235} divides by fission into two highly stable fractions.

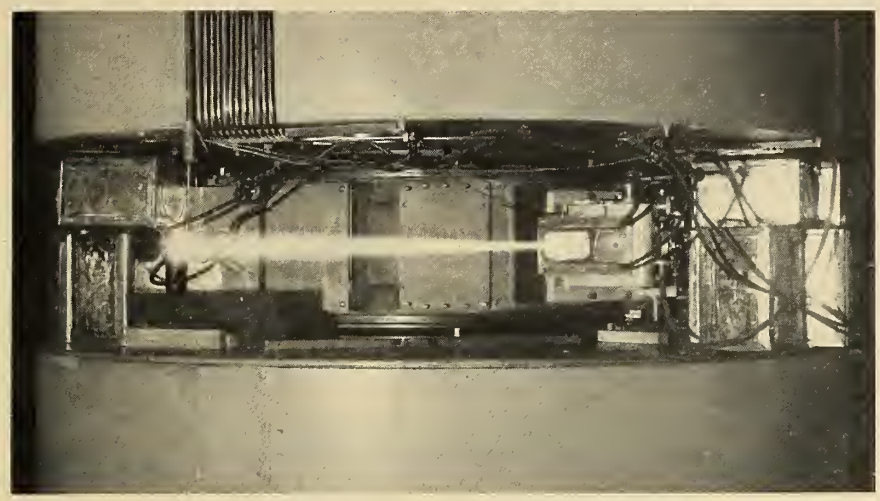


Fig. 5. Beam of sixteen million volt deuterons from the biologic research cyclotron.

Our political leaders, deeply moved by the awesome potentialities of atomic energies when applied to the search for biological truths and the alleviation of human suffering, are fearful only lest the advancement of science be curbed by frantic measures designed to suppress the logical exploitation of the newly found power.

Returning to the pre-war period, let us review the promising achievements in the three medically important directions which nuclear research has achieved. In the tracer substance field, a radioactive isotope of carbon was used by Ruben and Kamen to study the modus operandi of photosynthesis. Barley sprouts exposed to an atmosphere of carbon dioxide in which the carbon atoms were artificially radioactive were found to assimilate this element even in the absence of sunlight, thus reopening the entire subject of photosynthesis to explanation. Tellurium, bombarded in the cyclotron, was in part converted into a radioactive isotope of iodine by transmutation. Recovered chemically, since its chemical properties are identical with those of naturally occurring iodine, Hamilton and Soley administered this material to animals and then to humans. By virtue of its characteristic gamma radiations the marked iodine was identified *in vivo* lodged almost exclusively within the thyroid. Its exact location within the gland in relation to microscopic structures was identified by means of cleverly conceived auto-radiographs prepared by placing thin sections of thyroid in direct contact with photographic film. The potentialities of this form of investigation seem to be virtually limitless.

Intracellular radiation therapy was accomplished by the administration of P^{32}, a radioactive isotope of ordinary phosphorus produced by cyclotron bombardment, which like all phosphorus is rapidly mobilized in the reticuloendothelial system. Radiation effects produced within marrow cells and neighboring bone are fully as potent as those brought about with external radiation in patients with leukemia, and the annoying side effects known as radiation sickness are not encountered. Dosage

can be controlled with great precision. P^{32} is particularly effective in the treatment of polycythemia vera.

Under the direction of Robert Stone, professor of radiology at the University of California, hopelessly incurable cancer patients contacted at the university's tumor clinic, were subjected to external exposures of beams of fast neutrons (nuclear particles possessing mass without electrical charge) driven in considerable numbers from beryllium during cyclotron bombardment. Under this form of treatment skin reactions and reduction of tumor size occurred which were entirely comparable to those observed when high voltage x-rays are used. Further experimentation, using various biological material as test objects, provided evidence to support the hope, if not the belief, that neutron radiation has a uniquely selective biological action. There is reason to hope that this or some other available form of particulate radiation will prove to be more effective than x-rays and the gamma rays of radium in the treatment of malignant neoplasms.

And what of the years ahead? The expanse of territory to be explored in the field of biophysical research with the aid of the energies released by nuclear disintegration seems to be most intriguing and virtually limitless. New instruments, the betatron and the synchrotron, capable of accelerating electrons to fantastic speeds, give promise that it may be possible to employ converging rather than diverging radiation in attempting to reach deep-seated tumors with external radiation. Electrons, being negatively charged, can be directed in their course by suitably designed electrostatic fields. Extremely powerful cyclotrons capable of accelerating positively charged protons can generate particulate beams which do not lose their energy to any material extent until considerable thicknesses of tissue have been traversed. Protons produce maximum ionization effects at the end of their course of travel. These properties are the ones most to be desired in deep therapy and for the first time there is some promise that they may become available clinically.

In addition to the innovations made possible by the employment of radioactive isotopes in the field of chemical experimentation, the development of a new instrument, the mass spectograph, opens this avenue of research far wider. Because their atomic weights do not conform to those of

(Continued on Page 1348)

Refrigeration in Surgery

By Charles J. Mock, M.D.
Chicago, Illinois



Full credit for the development of refrigeration must go to Allen, Crossman and their co-workers[1,2] at the New York City Hospital. Temple Fay, with his general refrigeration of the entire body in an attempt to treat cancer, was a forerunner to Allen's work. Mock and Mock[3] have previously reported the essential points included in this paper.

The author has had only a limited experience with refrigeration anesthesia. He has personally used it on only one major amputation and on many minor procedures. The major amputation was a below the knee amputation performed recently on a sixty-three-year-old white man with a definite psychosis and considerable hypertension and arteriosclerosis. He jumped from a second story window when he felt trapped by hostile characters during a paranoid delusion. He sustained a severe comminuted fracture of both bones of the left leg just above the ankle. This fracture was treated with Steinman pins through the os calcis and tibial tuberosity, and a circular plaster cast incorporating these pins was applied to the lower leg. He was treated in a private sanatorium because of his psychosis. Due to the lack of surgical facilities there and the severity of his psychosis, ischemia developed in the fractured extremity. Three days after the injury he was transferred to St. Luke's Hospital because it was then felt that the condition of the left lower extremity was more critical than his psychosis. The cast was immediately removed, the immobilization of the fracture being maintained by skeletal traction, utilizing the pin already in the os calcis, with the left lower extremity supported in a Thomas splint. The whole left foot was cold and blue. There was anesthesia of the entire left foot. Both dorsalis pedis pulsations were absent. Popliteal pulsations in both legs were good. All palpable peripheral arteries were markedly arteriosclerotic. Blood

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pressure was 198/102. The heart was enlarged to the right and the left, and there were frequent extra-systoles. At times the patient seemed to speak and think quite normally, but frequently he was disoriented, irrational, and very difficult to handle. Penicillin was started and the leg was surrounded with fourteen ice bags. In spite of the fact that these ice bags were bandaged in place they were difficult to maintain there because of the patient's lack of co-operation. Circulation failed to improve with this treatment. The foot became more blue and a line of demarkation appeared at the ankle joint. However, the patient's general condition remained stable.

Considering the patient's age, his arteriosclerosis and hypertensive heart disease, and his mental condition, he seemed to the author to be an ideal candidate for refrigeration anesthesia. Seven days after admission, utilizing the refrigeration anesthesia technique described herein, an amputation of the lower leg was performed 5½ inches below the knee joint. The operation proceeded smoothly. The blood pressure, pulse and respirations remained stable throughout. Surgery caused no change in the patient's mental condition. He complained slightly of pain when the deep peroneal nerve was cut but cutting the other major nerve trunks apparently caused no discomfort.

Otherwise, all the author's experience with refrigeration has been gained through assisting Harry E. Mock, Sr., on many of his cases. With his permission some of these cases are reported below.

Refrigeration is a chilling of the tissues. It is not freezing, which damages tissues.

Refrigeration of an extremity slows down the cellular metabolism and reduces the requirements for a normal supply of blood and oxygen. The survival period of tissues with inadequate circulation is increased many fold at a temperature near freezing. Refrigeration likewise inhibits the growth of any bacterial invasion, even the exceedingly dangerous gas bacilli. The gangrenous extremity which, under the older methods of hot fomentations or heat treatment, usually progressed from a dry to a moist and badly infected gangrenous condition, remains as a dry, painless extremity.

Refrigeration further allows time for the development of collateral circulation. A gangrenous condition which seemed inevitably bound for the high thigh has finally limited itself to the lower leg.

Refrigeration analgesia, in contradistinction to refrigeration anesthesia, can be obtained without the use of a tourniquet merely with ice bags closely applied to the skin and well insulated with a large rubber sheet. Under this analgesia minor operations can be performed, such as skin grafts, opening abscesses, the application of skeletal pins, and the reduction of minor fractures.

Refrigeration anesthesia is the use of chilling agents in combination with a tight tourniquet applied about the extremity, with the refrigerant extending 3 inches above the tourniquet. A tourniquet is required, for without it the circulating blood in the extremity would prevent lowering the temperature in the deep tissues sufficiently for complete anesthesia, especially to large nerve trunks. Producing analgesia at the tourniquet site for eight to twelve hours before applying the tourniquet makes this a painless procedure. Refrigeration must be extended 3 inches above the tourniquet. This puts all cells at rest and avoids damage to the tissues from asphyxia. These hibernating cells do not throw off waste products, so that systemic shock from histotoxins released into the circulation on removal of the tourniquet need not be feared.

Such refrigeration produces anesthesia by lowering temperatures almost to 0° C., stopping all cellular metabolism. These inactive cells do not respond to stimuli, and an anesthesia of protoplasm results. Under this method amputations can be performed without pain or shock to the patient. It is, therefore, chiefly applicable to the old, to the poor operative risk, and to severe trauma of the extremities when other injuries or complications contraindicate the use of a general or a spinal anesthesia.

Immediately after Harry E. Mock, Sr., first described refrigeration at a surgical meeting in Omaha, 1942, a doctor there had a case of diabetic gangrene for amputation. He wrote requesting details of the procedure. The reply is an excellent description of the technique, and it gives a typical case of an old, debilitated patient who developed gangrene and neglected the condition until it was infected and the patient was in a condition of poor operative risk.

"Dear Doctor James:

"I have your letter of March 19, 1942, concerning your diabetic gangrene case.

"I did a low-thigh amputation yesterday on a seventy-three-year-old woman who had a diabetic foot and ankle

with infection—temperature 102°. Three weeks ago I had begged her to permit amputation but she refused. When the pain became intolerable, she consented. For forty-eight hours I kept this foot and ankle surrounded by ice bags until we could get the sugar down and patient in better shape to operate.

"I operated at 11:00 a.m. yesterday. The patient was somewhat apprehensive, and the anesthetist covered her face with the mask but gave only oxygen throughout the operation. When I sawed through the bone the anesthetist turned on the aspirators so that the noise of the latter prevented her hearing my sawing. When the operation was over the patient was smiling and joked with me about trying to fool her, and showed no evidence of shock.

"When she was returned to bed, four ice bags were placed around the stump to help eliminate infection. This partial refrigeration of the stump will be gradually reduced until at the end of the week no ice bags will be used. Meanwhile she is receiving plenty of fluids and glucose, and the medical man is controlling her diabetes with insulin. Her temperature today was 100°. Her condition was excellent. A blood transfusion was given right after the operation.

"Now, as regards the refrigeration anesthesia:

"At 8:00 a.m. yesterday four ice bags were placed about this patient's thigh in order to reduce sensation to the tourniquet. At 8:30 a.m. a soft rubber tube was placed tightly around her thigh twice and was held with two long stomach clamps or forceps without teeth. This enabled an easy removal of the clamps and the tourniquet when I was ready to have them removed. The tourniquet was placed about 6 inches above the knee, as my operative site was to be just above the condyles of the femur. It was put on sufficiently tight to shut off the arterial and venous blood. It caused this patient some pain but not sufficient to warrant an opiate. If ice bags had been used one hour longer about the thigh before putting on the tourniquet, I do not believe she would have had any pain. No second tourniquet was used.

"Immediately after applying this tourniquet, a large rubber sheet was fastened snugly about the thigh 3 inches above the tourniquet. It came down as a trough under the leg to below the foot. This trough was then filled with approximately three buckets of cracked ice. The ice completely surrounded the foot, leg and thigh to at least two inches above the tourniquet. The rubber sheet was then wrapped over the leg surrounding all this ice so as to hold it in a closed trough or funnel. It was watched carefully and additional ice added once so as to keep the extremity completely covered with ice. The temperature inside this rubber sheet was approximately 2° above centigrade. This refrigeration was continued two and one-half hours. The patient was then removed to the operating room with the trough or funnel still about the leg. When we were all ready the rubber sheet was unpinned and the ice allowed to roll out into a large basin. The leg was prepared with iodine and alcohol above the site of the gangrene up over the thigh including painting the tourniquet and for four inches above the tourniquet. A sterile towel clipped to the skin just below the tourniquet was turned upward over the thigh. A pillowcase surrounded the gangrenous foot and lower leg. The usual draping was done.

"I then proceeded to amputate this leg as described above without any anesthesia. Due to refrigeration all shock of operation was eliminated. Blood pressure readings showed only a two-point variation during the operation.

"Trusting this detailed report of a case I did yesterday will help answer your questions, I remain

Sincerely yours,
HARRY E. MOCK, M.D."

Dr. James' reply is of interest.

"Dear Dr. Mock:

"I received your kind letter Sunday and wish to thank you very much.

"I operated on our patient yesterday (Tuesday). The details of the technique as you gave me were followed very closely with the exception that refrigeration was started at 7:30 a.m. instead of 8:00. The tourniquet was placed at 8:30 and the patient did not object. She just made the remark that "that was tight," complaining of no pain. Our patient had one seconal capsule and 1/6 grain of morphine at one hour and at forty-five minutes, respectively, before the operation. I am enclosing a copy of our operating notes which show how successful the procedure was.

"I am really not over the wonder of this thing yet. At the end of the operation I went to the patient and, waking her, asked her how she felt. She was not conscious of the fact that her operation was over. She is quite deaf, and that helped some, no doubt, at the time of the noise of the instruments and the sawing of the bone.

"Let me thank you again for such careful description of the details.

Sincerely yours,
M. C. JAMES, M.D."

His operative report indicated that the operation was most successful. Anesthesia was complete and there was no change in pulse.

One great advantage of refrigeration anesthesia in diabetics is that the absence of reaction allows the patient to miss no meals, and the diet and insulin dosage require little juggling.

It has been found that prolonging the refrigeration prior to the application of the tourniquet to eight to twelve hours, as described, avoids all complaints from the patient. The length of time required for complete anesthesia in the deep tissues varies with the locality, a thick thigh requiring more time than an emaciated calf. However, two and one half to three hours has been sufficient to obtain complete anesthesia. With this, there is no pain on cutting or manipulating the sciatic

nerve and no change in pulse, respirations or blood pressure. The anesthesia lasts about one hour, and therefore the operating lights are kept off until the surgeon is ready to make his incision, and the sponges are kept moist with a cold rather than a warm solution.

This complete absence of shock is of great value, particularly in this type of elderly, debilitated patient. Refrigeration anesthesia is also applicable in severely traumatized patients when avoidance of additional shock is imperative. Refrigeration will further inhibit infection, limit the formation and absorption of histotoxins, thus helping to minimize shock, and give time for preparing the patient for operation.

One patient, previously reported *Surgery, Gynecology and Obstetrics,*[4] suffered multiple fractures of the pelvis, with resulting loss of circulation in the right lower extremity from damage to the iliac vessels. Gangrene seemed inevitable, and a high thigh amputation was contemplated, but the patient's condition was such that operation might be fatal. He had complications consisting of a cerebral concussion, a severe chest injury, a ruptured urethra, an infected large hematoma of the left buttock and thigh, and a grave pneumonia. His entire right lower extremity was surrounded by sixteen ice bags well insulated by a large rubber sheet. It was like placing this bloodless extremity in an ice box until it could be cared for later. This refrigeration was maintained for two and one half weeks. During this time the patient was allowed to recover from his complications. The refrigeration without tourniquet held in abeyance all infection and pain which were bound to occur in this gangrenous extremity by any previous method of management. Refrigeration also permitted collateral circulation to develop sufficiently to maintain viability as low as the lower one third of the thigh. A tourniquet was applied in the manner described above, the extremity was packed in cracked ice for three hours, and a mid-thigh amputation was performed with no further anesthetic or sedative and with no discomfort during or following the operation. This is an impressive demonstration of the value of refrigeration without tourniquet followed by refrigeration anesthesia for amputation.

The absence of shock with this anesthesia is also of value in bilateral amputations. Another patient had infantile paralysis at eight months of age and never walked normally. He got about in a small wagon or by being carried, going through high school in this fashion as top man in his class. He cared for his fine horses, with which he won many prizes at various fairs, by standing and walking about on his knees. He had developed severe flexion contractures of his knees. He was studied by H. E. Mock, Sr., and he and three other doctors concurred that bilateral amputation was indicated. The anesthesia department, fearing too great shock, suggested that each amputation be done at separate times. However, under refrigeration anesthesia, bilateral amputation just below the knees was done with not a particle of shock. Prostheses, with special sockets to hold his knees in their flexed position, allow him to get about well and as upright as anyone, although when he requires great stability on his feet, he still removes the prostheses and walks about on his knees as formerly.

Refrigeration can also be an excellent basal anesthetic. In a two-year-old boy an amputation was performed 4½ inches below the knee because of a congenitally deformed foot. For eighteen hours before amputation this lower extremity, from the mid-thigh to the foot, was surrounded by ice bags insulated by a rubber sheet, but without the use of a tourniquet. In the operating room a tourniquet was applied without the patient being aware of it. As the incision was made the anesthetist slowly started drop ether. The baby was never completely under the anesthetic and less than an ounce of ether was used. The patient was wide awake when the skin was closed.

Even when amputation is not done, refrigeration without the use of a tourniquet is of great therapeutic value. Infection is controlled, pain and shock are eliminated, and parts of an extremity may be preserved until collateral circulation has had time to become established. One man suffered a severe burn on the back of the leg when a red-hot piece of steel rolled off the rolling mill and struck him in this region. The popliteal space was burned deeply, exposing the great vessels and the tibial branch of the sciatic nerve. The gastrocnemius muscle and the Achilles tendon were thoroughly cooked. Forty-eight hours later gross infection was present, his temperature was 103°, and he was suffering severe pain. His general condition was poor. At that time H. E. Mock, Sr., was called in consultation, with the expectation that he would perform an amputation in the thigh. He advised refrigeration without the use of

a tourniquet. The leg was surrounded with well-insulated ice bags and penicillin was administered. Within twenty-four hours the patient was free from pain, and in forty-eight hours he was afebrile. The next day a thorough debridement was done under general anesthesia. Following this, the refrigeration was continued for three weeks. At the time of debridement it was felt that a lower leg amputation would still be necessary. However, the popliteal space filled in, the gastrocnemius muscle reformed its shape with granulation tissue, and only over the Achilles tendon did deep burn ulcers persist. Six weeks following the injury the entire calf was skin grafted. Three weeks after that the ulcers about the Achilles tendon were in condition for grafting. The skin grafts took well, and the patient is now ambulatory without difficulty, although he continues to wear a foot drop spring because of a persistent foot drop, which is improving. Many would give most of the credit for the preservation of this extremity to penicillin, but from previous experience it seems quite certain to us that refrigeration played a major role in controlling the infection, allowing time for the establishment of collateral circulation, and avoiding an amputation.

Refrigeration has further proved of great value for skin grafting, as reported by Harry E. Mock, Jr., in 1943. Ice bags, applied tightly to the skin for two hours, gave complete anesthesia for the cutting of split thickness and pinch grafts. This proved to be a very simple procedure and was frequently done at the bedside. Refrigeration does not affect the growth of the graft nor repair of the donor site. In one case of severe burns of the back of both lower extremities, the buttocks and the lower back, the patient was forced to lie prone for nearly six months. Skin grafts were obtained from both shoulders and upper back seven times. The only anesthetic used was ice bags applied to the donor site, and each operation was done at the bedside.

Conclusions

1. Refrigeration retards cellular metabolism, inhibits bacterial growth, diminishes formation and absorption of histotoxins, and controls pain. Tissues are preserved and time is gained to allow establishment of collateral circulation, to prepare the patient for surgery, and to permit recovery from complications.
2. Refrigeration without a tourniquet may be continued indefinitely with these benefits, without detrimental effects except for some delay in healing during the time of chilling.
3. This refrigeration analgesia is, in addition, advantageous for skin grafting and other minor procedures and as a basal anesthetic.
4. Under refrigeration anesthesia with a tourniquet, amputations may be performed without pain or shock.
5. This shockless amputation is of great value in the elderly, debilitated, poor operative risk, with arteriosclerosis, with or without diabetes; in severe trauma of the extremities when additional shock must be avoided and when the use of a general or spinal anesthesia is contraindicated; and in bilateral amputations.

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MEDICAL IMPLICATIONS OF ATOMIC ENERGY

(Continued from Page 1344)

normally occurring forms, artificially produced stable isotopes of such elements as carbon can be identified easily and accurately, and furthermore such materials can be manufactured in great quantities.

The development of the atomic bomb was by no means the only, nor perhaps the most important, end product of the Manhattan Project. In the course of its production the full scientific resources of this country were focused upon the advancement of knowledge regarding the secrets of the inner atom. A huge army of eager investigators devoted years of the most intense effort to this end, with the results that theories have been promulgated and put to test, and necessary skills have been developed on a scale which could not have been accomplished without the stimulus of a national crisis. It is reasonable to expect that in the years immediately ahead the repercussions of Hiroshima and Nagasaki will continue to be felt throughout the profession of medicine.

The Diagnosis and Treatment of Hyperparathyroidism

By F. Raymond Keating, Jr., M.D.
Rochester, Minnesota



HYPERPARATHYROIDISM is an uncommon affliction, but it is becoming increasingly evident that this condition is not the great rarity it was once supposed to be. Because the earliest instances of proved hyperparathyroidism were found in cases of osteitis fibrosa cystica generalisata, it has been assumed erroneously that the disease appeared only in this spectacular and extreme form. The monumental contributions of Albright and his colleagues[1-3] made it clear that renal lesions are more frequent and more important manifestations of the disease than skeletal lesions[2], and furthermore, that hyperparathyroidism frequently occurs without producing any clinically evident disease of the skeleton.[3]

Symptoms

An abnormal increase in the quantity of calcium in blood is the most obvious and perhaps most important physiologic alteration produced by hyperfunction of the parathyroid glands. As a result of hypercalcemia, the amount of calcium excreted in the urine increases. This increased excretion, in turn, leads to an excessive loss of calcium from the body, unless the intake of calcium is adequate to compensate for the loss. Under certain circumstances, the continued excretion of large quantities of calcium in the urine produces demineralization of the skeleton. When demineralization is extreme, the remarkable syndrome known as osteitis fibrosa cystica generalisata results.

The symptoms produced by hyperparathyroidism, therefore, may be divided into those resulting from (1) the increased quantity of calcium in the blood, per se, (2) involvement of the urinary tract, and (3) involvement of the skeleton.

Hypercalcemia produces fatigue, muscular weakness, atony, constipation, lethargy, stupor and, in extreme cases, coma. In addition, severe gastro-intestinal symptoms, particularly nausea, vomiting and abdominal pain, may be the direct result of hypercalcemia. Rogers[7] has reported two fatal cases in which such gastro-intestinal symptoms predominated. In many cases of hyperparathyroidism, however, symptoms referable to hypercalcemia are absent or, if present, are so mild and so vague as to be without diagnostic value except in retrospect.

The excessive excretion of calcium in the urine is sometimes accompanied by polyuria and polydipsia, occasionally of such severity as to suggest diabetes insipidus. In many cases, however, such symptoms are entirely lacking.

Since calcium is maintained in solution with difficulty, it is not surprising that excessive excretion of calcium predisposes to the precipitation of calcium salts in the urinary tract. In some instances, deposition of calcium occurs in the renal parenchyma and nephrocalcinosis[2] results. This condition may lead to a progressive decline in renal function, following a course not unlike that of chronic glomerulonephritis or pyelonephritis and terminating in uremia and death.

More commonly, however, deposits of calcium occur in the renal pelvis or about the renal papillae, as do renal calculi from other causes. Any or all of the signs and symptoms related to renal calculi may thus be produced.* The majority of the stones which form in parathyroid disease are calcium oxalate; the stones may be single or multiple, unilateral or bilateral, but stag-horn calculi rarely, if ever, result from hyperparathyroidism.

Involvement of the skeleton may vary all the way from barely discernible demineralization evident only on roentgenologic examination to extreme and deforming osteitis fibrosa cystica generalisata. In the latter condition, tumors, cysts, pathologic fractures and deformities may occur. In all cases in which skeletal involvement is present in any significant degree, skeletal aches and pains are the rule. When the skeletal disease is minimal, however, it is often virtually symptomless.

One of the striking features of hyperparathyroidism is the pronounced variation in symptoms from patient to patient. Few patients present all of the symptoms and signs, severe hypercalcemic symptoms, serious renal involvement either from nephrocalcinosis or renal calculi, and pronounced skele-

From the Division of Medicine, Mayo Clinic, Rochester, Minn. Read before the twelfth annual clinic of the Ingham County Medical Society, Lansing, Michigan, May 2, 1946.

*It is difficult to estimate what percentage of cases of renal stones would be found, on careful investigation, to be caused by parathyroid disease. The incidence at the Mayo Clinic is probably between 2 and 4 per cent of all cases of renal calculi.

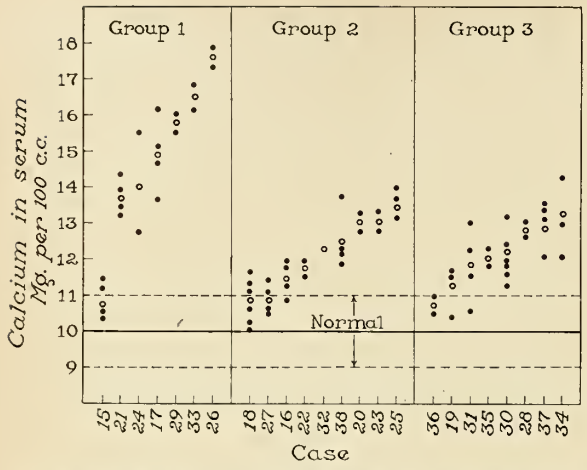


Fig. 1. The level of calcium in serum of twenty-four proved cases of hyperparathyroidism. Group 1 includes cases of classic osteitis fibrosa cystica generalisata. Group 2 includes those in which involvement of the skeleton was mild or minimal. Group 3 includes cases in which involvement of bone was not apparent. The cases in each group are arranged in order of average calcium values. Each vertical column represents determinations in an individual case, black dots represent individual determinations and circles, the average level.

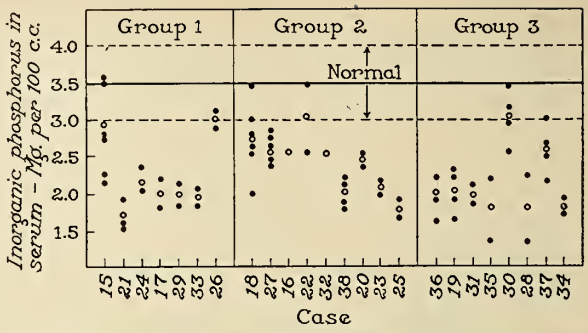


Fig. 2. The level of inorganic phosphorus in the serum of same cases as in Figure 1. The groups and the order of cases are the same as in Figure 1.

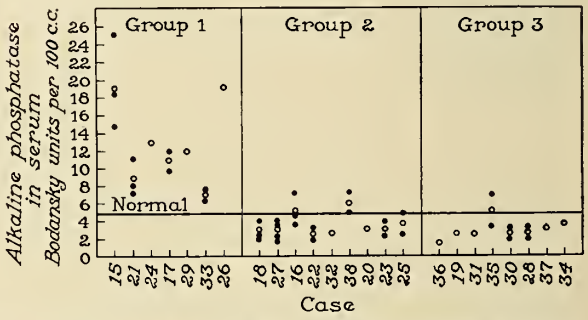


Fig. 3. The level of alkaline phosphatase in serum in cases of proved hyperparathyroidism. The groups and the order of cases are the same as in Figures 1 and 2.

tal disease. A few will have severe skeletal disease and little else. The greatest number consult a physician solely because of symptoms resulting from renal calculi. In these cases hypercalcemia or skeletal symptoms are either minimal or entirely lacking. To complicate matters further, hyperparathyroidism has been found to occur without conspicuous involvement either of the skeleton or of the urinary tract. In such cases, the only symptoms are those which result from hypercalcemia, per se.

Diagnosis

The diagnosis of hyperparathyroidism should be considered in the following types of cases: (1) cases of renal calculi in which the etiology is not established; (2) cases in which clinical or roentgenographic evidence of a generalized demineralizing process in bone is found; (3) cases of cysts or tumors of bone, and (4) cases in which polyuria and polydipsia are not associated with diabetes mellitus or diabetes insipidus. In addition, some cases of hyperparathyroidism have been found in which the predominating symptoms were gastrointestinal.

In any case in which the presence of hyperparathyroidism is suspected, clinical proof of the diagnosis depends on the demonstration of (1) an increased concentration of calcium in the serum, (2) a reduced concentration of inorganic phosphorus in serum, and (3) an increased excretion of calcium in the urine. As can be seen in Figures 1 and 2, considerable fluctuation in values occurs in individual cases and in a considerable number the departure from normal values is surprisingly small. Accurate diagnosis, therefore, requires that repeated determinations be made.

The quantity of alkaline phosphatase in serum indicates the presence or absence of bone disease, not of parathyroid disease. As seen in Figure 3, alkaline phosphatase is elevated consistently only in those cases in which hyperparathyroidism has produced pronounced skeletal changes, but remains normal in spite of hyperparathyroidism when skeletal involvement is minimal or absent.

For accurate determination of the excretion of calcium in the urine, the patient must be on a weighed diet, low in calcium and the quantity of calcium in the urine should be determined accurately for several days. On the standard low calcium diet[5] normal persons usually excrete less than 100 mg. of calcium a day, whereas patients who have hyperparathyroidism usually excrete more than 200 mg. (Fig. 4).

Such a study is far too cumbersome for ordinary diagnostic use. The test devised by Sulkowitch[4]

and his associate provides a means for rapid estimation of the presence or absence of excessive excretion of calcium. When equal quantities of the Sulkowich reagent and urine are mixed, calcium is

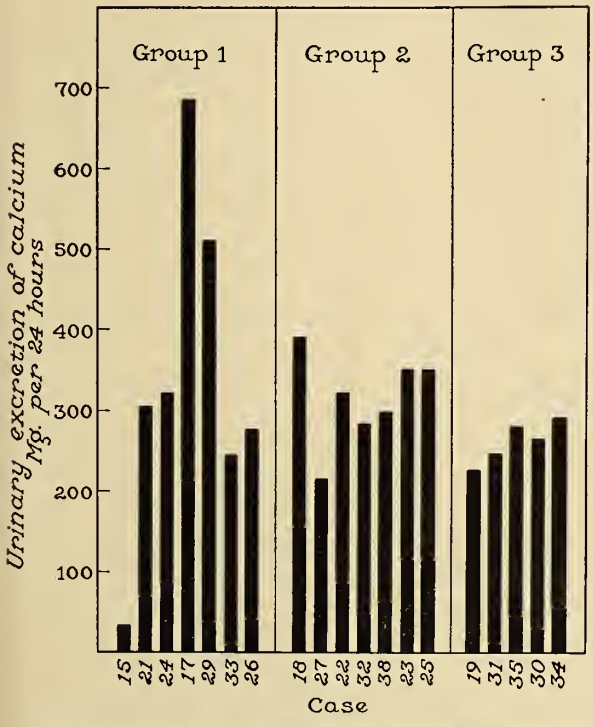


Fig. 4. The excretion of calcium in the urine in cases of proved hyperparathyroidism. In most instances the quantity shown is the average daily excretion determined in a period of three to six days. The patients were on a weighed diet low in calcium.

precipitated as a cloud. A faint cloud indicates the presence of a moderate amount of calcium, and a heavy cloud, a large amount. The presence of a heavy cloud does not necessarily indicate that the patient has hyperparathyroidism. However, absence of a heavy cloud is adequate proof that the condition is not present, provided (1) the urine has a normal specific gravity and (2) there is no renal insufficiency.

The presence of renal insufficiency as a complication makes the diagnosis of hyperparathyroidism extremely difficult. Renal insufficiency apparently tends to lower the level of serum calcium, increase the level of serum phosphorus and reduce the amount of calcium excreted in the urine. Hence, it tends to obliterate the essential diagnostic criteria for hyperparathyroidism. Furthermore, a condition known as secondary hyperparathyroidism with parathyroid hyperplasia may occur as a consequence of severe and protracted primary renal disease, such as glomerulonephritis or polycystic kidneys. Osteitis fibrosa cystica generalisata may occur which is indistinguishable from that which follows primary hyperparathyroidism produced by tumor or primary Wasserhelle hyperplasia. When extensive disease of bone and extensive renal in-



Fig. 5. The skull in a case of extensive disease of bone. The tables have disappeared and there is diffuse osteoporosis. The circumscribed area of demineralization in the frontal region is somewhat unusual.

sufficiency coexist, it may be almost impossible to differentiate between these conditions, although the causes are very different.

Roentgenologic Findings

In classic osteitis fibrosa cystica generalisata, roentgenograms of the skeleton may disclose pathologic fractures, multiple cystic regions, expanding tumors of bone and many sorts of skeletal deformities. In all cases, including the milder ones, the entire skeleton is demineralized in varying degrees. The process is usually most intense in the extremities and the skull, and in the mildest cases, equivocal changes in the skull or fingers may be all that are found. The bony structure assumes a characteristic coarse appearance that suggests the fibrocystic metamorphosis found on pathologic examination. Subcortical absorption occurs beneath the periosteum of the long bones. Roentgenograms of the skull show diffuse miliary osteoporosis and dissappearance of the bony tables (Fig. 5).

Albright emphasized the usefulness of the dental roentgenogram in the diagnosis of hyperparathyroidism with disease of bone. The alveolar process shows disappearance of the lamina dura (the

fine line of cortex investing the root of each tooth) and marked alteration of the pattern of the bone (Fig. 6). Since the teeth are unaffected by hyperparathyroidism, their density remains the same,

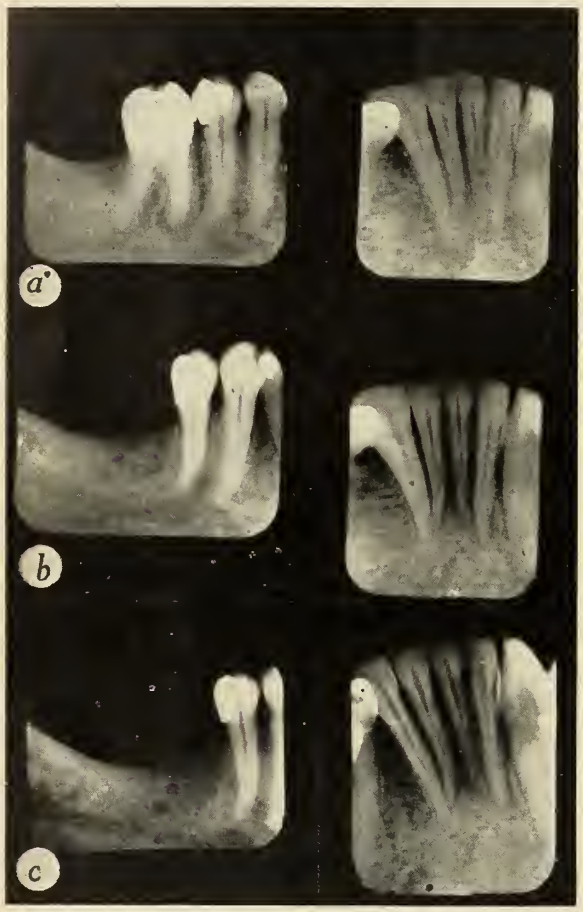


Fig. 6. The development of osseous disease due to hyperparathyroidism as illustrated by serial roentgenograms of the teeth in the same patient. (a) Appearance of the mandible one year prior to the onset of symptoms of hyperparathyroidism. (b) The same region four years after the roentgenograms in (a) were taken and three years after the development of symptoms. At this time osteitis fibrosa cystica generalisata was present. The mandible shows demineralization, alteration of the bony architecture and disappearance of the lamina dura. (c) The same region six months after removal of a parathyroid adenoma and elimination of hyperparathyroidism. Some recalcification has occurred; the lamina dura is reappearing, but the abnormal pattern has persisted.

and on this account mild degrees of demineralization may be more evident in the jaw, by contrast with the teeth.

Differential Diagnosis

Hyperparathyroidism must be differentiated (1) from other conditions producing hypercalcemia and (2) from other conditions producing disease of bone.

Of the other conditions producing hypercalcemia the most important condition to consider in differential diagnosis is hypervitaminosis D. An attempt must be made in every case in which hypercalcemia is present to find out whether the patient has been receiving treatment with vitamin D, since in many cases in which large quantities of this vitamin have been taken, hypercalcemia, hypophosphatemia and hypercalcinuria may occur. In a few, the full range of symptoms of hyperparathyroidism, which have been described, including changes in the skeleton, may occur. Sarcoidosis and multiple myeloma also produce hypercalcemia, but in both conditions, hyperproteinemia is usually present and other clinical features usually simplify the diagnosis.

Conditions associated with generalized or diffuse disease of bone may include secondary hyperparathyroidism, senile or postmenopausal osteoporosis, osteomalacia, multiple myeloma, the osteoporosis of hyperthyroidism, as well as that of Cushing's syndrome, and generalized carcinomatosis. In most of these, careful interpretation of the clinical features and chemical findings will clarify the diagnosis, but in some instances differentiation is exceedingly difficult.

Various focal or localized diseases of bone are also to be considered: the osteitis fibrosa cystica of Albright's syndrome, as well as osteitis fibrosa cystica disseminata, Paget's disease, solitary bone cyst, xanthomatosis ossia and others. It is to be remembered that hyperparathyroidism, a metabolic disease, is diffuse and generalized, not focal; the finding of areas of normal bone in a skeleton which is afflicted with marked pathologic changes elsewhere rules out the diagnosis of hyperparathyroidism.

Treatment

The treatment of hyperparathyroidism is surgical. In the majority of cases it is caused by tumors; in a few, by a peculiar form of hyperplasia of the parathyroids. Treatment with roentgen rays has proved entirely ineffective and no effective medical treatment is known. A diet high in calcium and phosphorus will help to prevent damage to the bones, but only at the risk of rapid and irreparable damage to the kidneys. A diet low in calcium and phosphorus will tend to spare the kidneys, but at the cost of eventual exhaustion of the supply in the skeleton. In rare instances, in which conditions prevail which necessitate temporary postponement of operation, the diet low in calcium and phosphorus is obviously preferable.

Surgical procedures on the parathyroid glands present great technical difficulties because of the small quantities of tissue involved and also because of the unusual variations in anatomic position which are encountered. A certain proportion of parathyroid lesions occur in the mediastinum. Hence, when careful exploration of the thyroid region has failed to disclose the lesion, the anterior mediastinum must be explored at a second stage.[6]

Obviously surgery has no place as a diagnostic tool. The diagnostician must provide the surgeon with sufficient clinical and chemical evidence for an unequivocal diagnosis of hyperparathyroidism; the surgeon has problem enough to find the tumor once its existence has been proved.

In a few cases serious parathyroid tetany presents a major postoperative hazard. In such cases, extensive disease of the bones and extremely high values for alkaline phosphatase are almost invariably present. The majority of patients who have moderate degrees of skeletal disease and all of those who have little or no skeletal disease escape tetany or, at the most, have only mild tingling for a few days after operation.

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MICHIGAN MEDICAL SERVICE BENEFITS INCREASED

In September, 1946, at the annual meeting of the membership of Michigan Medical Service, consisting of the House of Delegates of the Michigan State Medical Society and certain other officers, the Board of Trustees of Michigan Medical Service was instructed to investigate the possibility of extending the benefits to members beyond the present limitation to service in hospitals. The Board has announced that obstetrics in the home are now payable where hospitalization is not feasible; also care of accidents within eighteen hours, when hospital beds are not available, to a limit of $15.00.

Problems of Trauma

By John L. Lindquist, M.D.
Chicago, Illinois



THE PROBLEMS OF trauma that are to be considered in this paper are those encountered late in treatment, namely, the disabilities and impairments of function that often nullify splendid early efforts and good emergency treatment of injury. If one recognizes and anticipates the disability likely to result from a given injury, he is in a position to institute preventive measures that will minimize or eliminate many of these late problems.

The primary aim of treatment in the surgery of trauma is maximal restoration of function to the injured part. In order to achieve maximum function as an end result, the surgeon must maintain a perspective that covers the entire course of the traumatic condition from the beginning to the final result. A study of end results in many late cases of trauma reveals the fact that the degrees and types of post-traumatic disabilities follow certain patterns, more or less characteristic of the preceding injury; further, that measures directed against the development of these patterns have not been carried out adequately. During the immediate and early stages of treatment of trauma, the concern for anatomical restoration of injured parts and prevention of infection is so great that considerations of end function are frequently overshadowed or postponed. Anatomical restoration and healing entail immobilization of the injured part either through employment of splints or through voluntary inactivity on the part of the patient because of pain. Later the patient may prolong immobilization by unnecessary disuse, because of pain, fear, lack of effort, or failure to appreciate the importance of activity and the exact type of movements to be performed. If consideration of functional restoration is relegated to the later stage of treatment, intractable or permanent disability may result from injuries in which little or no inherent disability should reside. In the past too

Associate in Surgery, Northwestern University Medical School.
Read at the twelfth annual clinic of the Ingham County Medical Society, May 2, 1946, at Lansing, Michigan.

much reliance has been placed upon the application of heat, by diathermy or infra-red lamp, as a means of recovering function. These modalities, although of value, should be of secondary importance to the intelligent employment of motion prescribed by the surgeon and administered under his direct supervision.

It is my purpose to discuss some of the frequently encountered patterns of disability that follow trauma to the extremities and to consider means by which they might be reduced or eliminated.

Impairment of Function in the Hand

The most important function of the hand is the grip or ability to close the tips of the fingers into the palm, and to appose the thumb tightly against the other fingers. While ankylosis, deformity, or loss of tendon substance sometimes cannot be prevented or remedied following severe hand injuries or infections, in most instances much can be done to minimize the contracture of peri-articular tissues and the formation of adhesions about joints and tendons. The tendency toward contracture of joint capsules and peri-articular tissue increases with age and with the development of arthritic changes in the small joints of the hand. Particular care should be given to the prevention of contracture about these joints, especially in older patients and in those having arthritic changes. Too often a patient who sustains an injury to only one or two fingers acquires contracture and fixation, not only of the injured digits, but of the uninjured fingers as well, because of unwitting immobilization or disuse of the entire hand. To prevent this unfortunate result, all unnecessary immobilization must be eliminated and disuse guarded against. Essential immobilization must be employed, but only in the position of function.

During the period of treatment of the acute phase of injury, when the injured finger must be kept at rest, measures should be taken to maintain function in the adjoining fingers. At the time dressings are changed, the parts that can be moved with safety should be moved actively or passively one or more times, and the patient should be instructed to perform permissible motions several times daily. Attention must be given to the maintenance of motion at each of the digital joints, since all are concerned in grip. Passive, and particularly, active motion should be started in the injured hand as early and as far as possible without jeopardizing healing. The application of heat should be considered as an aid in overcoming inflammation rather than as a means of restoring motion. Normal flexion at a joint depends upon the existence of plications or slack at the extensor aspect of the joint capsule and peri-articular tissue in the position of extension, and normal extension depends similarly on folds at the opposite aspect of the joint. Inflammation about joints produces exudates, which organize to form adhesions between these plications while the joints are immobile. Fibrous adhesions, binding together the plicae or minute folds in the peri-articular tissues, prevent the separation and flattening out of the folds and thereby limit motion at the involved joints. The application of heat helps to allay inflammation and the formation of exudate, and aids in the absorption of exudate, but motion is essential to prevent the formation of rigid adhesions. Once adhesions have formed, the efforts of the physical therapist must be directed toward the gradual stretching out of the adhesions, a process which usually requires months of intensive treatment, and the outcome of which depends upon the duration and density of the adhesions. Prevention of the formation of rigid adhesions makes the task of the physical therapist easier and more productive and reduces both the amount and duration of disability in the part. The primary aim of treatment of the injured hand should be to restore or maintain the ability to grip the finger tips against the palm and the thumb against the fingers.

Impairment of Function in the Elbow

The tendency for serious impairment of function to occur following relatively minor injuries is perhaps nowhere more apparent than at the elbow joint. Contracture, ankylosis, and myositis ossificans are notoriously prone to develop at the elbow after trauma. The immediate treatment of injuries about the elbow joint is chiefly concerned with anatomical restoration or the prevention of infection and is not under consideration here. Following anatomical restoration and immobilization, the important feature of treatment is prevention of limitation of motion. Early mobilization of the elbow joint has frequently been stressed, and the principle of minimal immobilization for injuries of the elbow joint is familiar. The detrimental effects of passive stretching and forcible manipulation, however, are often disregarded. It is widely recognized that forcible manipulation

usually produces a decrease rather than an increase in the range of motion at the elbow joint following trauma, but confusion exists with respect to the difference between forcible manipulation and passive stretching on the one hand, and active motion against resistance on the other. The most beneficial form of motion for the recovery of function at the elbow is active motion against increasing, graded resistance. Technicians and nurses to whom physical therapy is usually delegated often use force in the treatment of elbow limitation unless they are definitely instructed to avoid it. A device commonly used to regain extension at the elbow is the method of having the patient carry a pail filled with increasing weights of water or sand. This is widely considered to be active motion against resistance, whereas it is, in effect, passive stretching. Active motion implies the use of extensor muscles actively to produce extension and of flexor muscles to produce flexion. In other words, the patient should be given exercises that employ his own muscles in providing the force against resistance. When a patient carries a weight to increase extension at the elbow, the extensor muscles are not active, but instead, the flexors immediately go into protective spasm to oppose the force. Active extension exercises for the elbow should consist of the pushing against a resistance by the extensor muscles, and active flexion exercises of the pulling up of weights by the flexors. Active motion carried out in this manner is not likely to be forcible enough to do harm and at the same time it will increase the strength of the muscles by use in overcoming resistance at the joint. The use of any form of passive stretching at the elbow is fraught with danger and is to be condemned.

Impairment of Function at the Shoulder

The most common disability occurring at the shoulder joint is the partial or complete loss of abduction. Although other movements at the shoulder may also be impaired following disuse, limitation of abduction constitutes the greatest handicap to the patient. Loss of abduction at the shoulder follows not only injuries in the vicinity of the joint itself, but also injuries and infections of the fingers or hand where the hand and arm are weighted down with heavy splints or wet dressings in the position of adduction. Peri-arthritic conditions at the shoulder, such as subdeltoid and subacromial bursitis, are very prone to develop spontaneously in adults but are particularly common after a period of disuse of the arm. Abduction becomes painful and is avoided by the patient. This leads to fixation at the joint, atrophy of the abductor muscles and contracture of the adductors. The triad of fixation, abductor atrophy, and adductor shortening, causing limitation of abduction, is extremely difficult to correct by exercises, because active abduction must be carried out against a double opposing force, namely, the force of gravity on the arm plus the mechanical disadvantage of the muscles acting on the abducted arm, which acts as a lever. In most instances of trauma to the upper extremity the triad is avoidable, and the development of fixation represents a poor result in the treatment of the original trauma.

Limitation of abduction at the shoulder requires a protracted period of strenuous and painful treatment for its correction and often cannot be fully overcome. The development of rigidity at the shoulder can easily be avoided by attention to the shoulder joint in the treatment of all traumas to the upper extremity. The arm may either be immobilized in the position of abduction, or if immobilization is not necessary, the patient should be instructed not to keep the arm against the side of the body. If the patient is confined to bed, the arm is kept away from the side with pillows or an abduction splint. The ambulatory patient is instructed to let the arm rest in an abducted position on the arm of a chair or on a table when he sits. While passive stretching at the elbow is to be condemned, it can be applied to the rigid shoulder with benefit at times as an adjunct to the use of heat, massage and active motion. In some cases of marked rigidity at the shoulder, passive stretching or manipulation under anesthesia is essential to recovery of abduction.

Impairment of Function in the Foot and Ankle

In contrast to the primary function of performance of movements in the upper extremity, the functions of weight-bearing and of locomotion are of more importance in the lower extremity than a full range of joint motion. While a full range of motion at all joints is desirable, a patient can compensate for a certain amount of loss of movement at a joint in the lower limb if the position of the part is such that the weight-bearing function is not impaired. An unfortunate result not uncommonly encountered following trauma

to the lower extremity is the rigid, plantar-flexed great toe, the so-called hallux rigidus. In some instances of hallux rigidus, amputation of the great toe has been necessary to restore painless weight-bearing on the foot. This complication of trauma is inexcusable and can be avoided by measures to prevent the weight of the bed clothes from resting on the toes. The great toe should always be splinted in its position of function, in the plane of the sole of the foot, and leg casts should extend beyond the distal end of the toe to hold the toe in this plane.

Rigid plantar flexion of the ankle joint is a similar but more serious disability and is encountered more frequently. This condition prevents the patient from getting the heel down on the floor in walking. It is extremely difficult to overcome long-standing plantar flexion of the foot and ankle. In the application of casts to the leg and ankle, the surgeon should maintain the position of the foot at 90 degrees with reference to the frontal plane of the leg. A small range of motion at the ankle will then provide not only good weight-bearing but also fair locomotion.

Displacement of the weight-bearing line at the ankle in the sagittal plane not infrequently follows the treatment of various types of Pott's fracture. This extremely disabling complication results from unrecognized rupture of the distal tibiofibular ligaments and interosseous membrane, with widening of the ankle mortise and displacement of the astragalus laterally. The ankle assumes a valgus deformity on weight-bearing, and persistent pain and swelling follow. A varus position at the ankle following immobilization can easily be corrected and is not disabling, whereas a valgus position means disability. More serious usually than the fracture itself, widening of the ankle mortise and astragalar displacement should be ruled out in every fracture near the ankle joint and corrected at the time of reduction, if present. Pott's original criteria for successful treatment, namely, that the weight-bearing axis and the ankle mortise be restored, are still sound.

Impairment of Function Following Knee Injury

A surprising number of patients who develop quadriceps atrophy with resulting weakness and instability of the knee joint after minor traumas are advised that they have a torn internal semilunar cartilage or other internal derangement of the knee. A striking degree of quadriceps atrophy can occur in a few weeks after relatively minor knee injury. The primary cause of the atrophy is disuse, and as the patient favors the injured member and avoids quadriceps activity in walking, the muscle becomes progressively flabbier and weakened and the knee more unstable. The instability of the knee then gives rise to repeated trauma, and a vicious circle is set up. The same factors are often responsible for poor results following surgery for internal derangements of the knee, and for the prolonged and recurrent attacks of synovitis and arthritis that occur at the joint. Prolonged immobilization of an injured knee is to be avoided, and exercises for the quadriceps muscle should be prescribed routinely and as early as possible. We have treated a large number of patients who have been advised to undergo operation on the knee joint, simply by the use of heat, massage, and quadriceps exercises, with gradual and complete recovery. Operation on the knee in such cases with its resulting period of disuse aggravates the quadriceps weakness and makes the condition worse. When quadriceps atrophy occurs, not only is weight-bearing at the knee faulty and attended with further trauma, but normal locomotion is also impaired.

The principles discussed briefly here are applicable to the treatment of many other traumatic conditions. If prevention rather than correction of disability is to be achieved in the surgery of trauma, the surgeon must make rehabilitation and physical therapy his immediate concern in treatment, instead of postponing restoration of function to a later period.

MSMS

STOP! THINK THAT:

Actual maintenance and service costs—not including capital cost for hospitalization of mental cases in Michigan for 1946—$21,777,454.

* * *

The early correction of unhealthy character traits may prevent the later development of serious mental and emotional illness.

* * *

The so-called postpartum psychoses occur in persons who had a fragile personality before the confinement. Those who do obstetrics might well recognize this.

* * *

Whether a person is an extrovert or an introvert is not as important as how he gets along with his extroversion or introversion.

—Mental Hygiene Committee

General Consideration of Hysterectomy

By Virgil S. Counseller, M.D.
Rochester, Minnesota



Complete abdominal hysterectomy is performed routinely by some surgeons when abdominal hysterectomy is indicated. It is never done by some, and others choose either total abdominal hysterectomy or supracervical hysterectomy after consideration of the condition of the cervix, mobility of the uterus and malignancy. For reasons that are obvious, the indications for complete abdominal hysterectomy cannot be stated dogmatically. A large percentage of abdominal hysterectomies are done by surgeons in general practice and by general surgeons in hospitals who may not adhere rigidly to the indications for complete hysterectomy used by the surgeons specializing in gynecology. Nevertheless, these indications must be based on pathologic and anatomic considerations and not on clinical symptoms or the technical ability of the surgeon. Vaginal hysterectomy is being performed with increasing frequency for conditions in which total abdominal hysterectomy was performed formerly.

The question, whether one should perform total abdominal hysterectomy or supracervical hysterectomy when abdominal hysterectomy is indicated, is one which has been discussed pro and con for many years. It seems to me that the lines can be fairly definitely drawn regarding the indications for both procedures. It is a mistake, I believe, to perform either one or the other of these abdominal procedures routinely when hysterectomy is indicated.

Cervical disease is one very important deciding point, and of equal importance is the mobility of the cervix. It seems quite clear to me that, if the cervix is normal and has normal mobility, there is no profound reason for total abdominal hysterectomy. Also, if abdominal tumors are the mechanism by which a cervix is held up in its proper position, it is illogical to perform supracervical hysterectomy and try to mobilize a very loose cervix even though it may be free from disease, because it is much easier and a more sound procedure anatomically to remove the cervix by total abdominal hysterectomy and support the vaginal vault by the cardinal ligaments. Therefore, the cervix holds a very important position with regard to the selection of the type of operation.

The cervices of most women who have had children exhibit certain degrees of erosion, inflammation, laceration, cysts, polyps and other changes, but in women who have had adequate postnatal care, little if any evidence of disease will be found.

For many years total abdominal hysterectomy was indicated for removal of the diseased cervix and prevention of annoying posthysterectomy vaginal discharge when hysterectomy was indicated for other inherent diseases of the uterus. Also, it was advised to prevent carcinoma of the cervical stump, which sometimes occurs after supracervical hysterectomy. The incidence of carcinoma of the cervical stump is now generally considered to be about 0.2 per cent. In view of such low incidence it is not reasonable to advocate total abdominal hysterectomy in order to prevent occurrence of carcinoma, particularly when other factors may produce an operative mortality rate which is considerably higher than that of supracervical hysterectomy if the complete hysterectomy is being performed by a surgeon not skilled in its execution. Erosions, lacerations with infections, eversions of the mucosa and polyps have been considered to have a definite relationship in the induction of carcinoma of the cervix, but the only evidence actually to support this belief is the higher incidence of carcinoma when these conditions are present. It is hardly reasonable to believe that they are the dominant factors, since a great number of carcinomas are encountered in nulliparous cervices without other disease.

Recently, in gynecologic clinics throughout the country an intensive pathologic study has been made routinely of cervices which have been removed at total hysterectomy for lesions other than those of the cervix in order to determine if early malignant lesions of the cervix are being overlooked. The pathologic findings suggest that epithelial hyperplasia and non-invasive carcinomas do exist in a larger number of cases than had been thought to exist previously. In the Mayo Clinic, biopsy is performed routinely of cervices

From the Division of Surgery, Mayo Clinic, Rochester, Minn.
Read before the twelfth annual clinic of the Ingham County Medical Society, Lansing, Michigan, May 2, 1946.

which are at all suspicious and which are not obviously cancerous. A large number of cases of carcinoma-in-situ have been found, but in considdering abdominal hysterectomy with regard to these cervices it must be remembered that these are not what are considered to be normal.

If the cervix is well supported and the biopsy shows that the lesion is benign, and supracervical hysterectomy is to be performed, either the endocervix should be destroyed with the actual cautery or conization should be performed preceding the hysterectomy. The use of these procedures should be recommended if the surgeon for definite reasons does not wish to perform total hysterectomy. For the same reasons supracervical hysterectomy should not be performed with complete disregard of the condition of the cervix, as has been done ill-advisedly in some cases of large fibroids and chronic pelvic inflammation. When abdominal hysterectomy is to be considered for any condition other than carcinoma of the fundus or adnexa which in itself requires complete hysterectomy, the state of the cervix must be observed carefully and it should be determined specifically at that time whether or not the cervix should be removed completely. The evidence seems sufficient that the cervix always should be inspected for disease of any type if abdominal hysterectomy is considered, and that if the cervix is diseased complete hysterectomy should be performed, or local treatment should be given at the time of operation and supracervical hysterectomy should be performed.

The mobility of the cervix is a very important consideration in abdominal hysterectomy. There are very definite postoperative results, such as vaginal shortening and fixation of the vaginal vault in total abdominal hysterectomy, which must be avoided regardless of the marital or sexual status of the patient. If the lesion for which hysterectomy is being done is malignant, these results need not be considered as factors. It seems to me that especially in the nulliparous patient if the vagina is of normal depth and the cervix appears normal, it is preferable not to perform complete hysterectomy especially if the patient is still young and single, because the vagina remains normal after supracervical hysterectomy. The length of normal vaginas varies considerably, and especially that of the anterior vaginal wall. Occasionally the posterior fornix and either of the lateral angles may be scarred or fixed from old lacerations so that complete hysterectomy would result in more fixation and perhaps shortening of the vagina. Once this occurs it can never be remedied and it can be a very definite factor in the future happiness of the patient. The cervices of most multiparas will be more mobile as a rule than others, unless fixed by intrapelvic disease. The increased mobility is due to the stretching of tissues incident to delivery. Many operations have been devised in an attempt to support the retained cervix more adequately instead of performing total hysterectomy. However, most of these operations are faulty unless combined with some more extensive vaginal plastic repair. It has been my observation that a poorly or inadequately supported cervix produces more distress to the patient than a well-supported vaginal vault.

Little need be said regarding the usual technique of supracervical hysterectomy. It is impossible to vary this technique in any great detail. Most of them have to conform to a certain pattern. This is not quite true with regard to total abdominal hysterectomy, as it can vary considerably. There are certain points in the execution of the technique which seem desirable to emphasize. Many surgeons recommend that a clamp be placed across the vagina in doing total abdominal hysterectomy to prevent contamination from the vagina. In carrying out this procedure one is almost sure to produce shortening of the vagina, or certain fixation will result from trauma. If the vagina is cleansed well preceding hysterectomy little infection will come from opening it. As a matter of fact, the amount of infection has been found to be so insignificant that some gynecologists now recommend leaving the vaginal vault open for more adequate drainage following total hysterectomy, and especially after Wertheim hysterectomy. In most instances in which the cervix is moderately mobile and the anterior and posterior fornices are redundant, the vagina actually can be lengthened by utilizing all of the vaginal wall instead of leaving some of it attached to the cervix, as is done in the clamp method. The method of opening the vagina posteriorly between the uterosacral ligaments is safer than to open it anteriorly. The vagina is then separated from the cervix by incision with curved scissors all the way around, leaving none of it attached to the cervix. The vagina is then closed with a running inversion stitch. The cardinal ligaments now become the crucial supporting structures of the vagina, and these ligaments are re-attached to the angles

of the vagina with the vagina well supported. The cardinal ligaments may be shortened for more adequate support. A serious mistake is often made by pulling the cardinal ligaments over the top of the vaginal vault. This immediately drops the vagina rather than elevating it for proper support.

There are some very definite indications for total abdominal hysterectomy. Among those indications are some carcinomas of the cervix. It must be definitely stated, however, at the outset, that malignant lesions of the cervix are not regarded generally as an indication for complete abdominal hysterectomy. There are a few types of cases, however, in which the condition may be treated adequately surgically rather than with radium. For example, carcinoma-in-situ and non-invasive carcinomas, either of high or low grade malignancy, form one of these indications, because all of these patients can be cured by total abdominal hysterectomy without removal of the adnexa or the subsequent treatment with radium. How long these lesions remain non-invasive is unknown, but it is probably many months. Furthermore, it is possible that some stage 1 carcinomas would be cured by total abdominal hysterectomy, but the possibilities of invasion of the lymph nodes are too great to justify any other procedure than a radical or Wertheim hysterectomy. The principles of the Wertheim operation are sound and the results have compared favorably with those for carcinomatous lesions elsewhere which have been treated surgically. The mortality and morbidity have been greatly reduced so that now they are within satisfactory limits. Gynecologists as a group are showing greater interest in the Wertheim hysterectomy because it now appears to be more effective in the treatment of some surgical conditions than it was considered to be previously.

Complete abdominal hysterectomy is indicated definitely in cases of carcinoma-in-situ and in some cases of stage 1 carcinoma. Another very important indication for complete abdominal hysterectomy is malignant lesions of the fundus and adnexa. In the treatment of carcinoma of the fundus, two schools of thought exist regarding preliminary irradiation treatment. One group believes that it should be given followed by hysterectomy, but others feel that preliminary irradiation is not indicated. However, it is agreed by both groups that the lesion should be removed surgically unless conditions other than the malignant lesion definitely contraindicate surgical intervention. Such general debilitating conditions as severe cardiac disease, advanced age and obesity are often considered as contraindications to total hysterectomy. At the clinic we do not give preliminary irradiation and feel that operation should be proceeded with at once in order to remove the lesion as soon as possible. The operative results and cures compare most favorably to those statistics of the other groups utilizing preliminary irradiation.

Malignant lesions of the adnexa are so quiescent in their development that they are the most serious of all malignant lesions of the female generative tract. The incidence of bilateral involvement is so high that conservative operation is never justified. This holds true for malignant cysts as well as for solid carcinomas of the ovary. The chances of cure by radical operation after the lesion has extended to the peritoneum or omentum are poor indeed. Also, 10 per cent of these lesions when first seen already have extended to the uterus.

In cases of benign intrapelvic lesions, *per se*, it is often necessary to perform complete abdominal hysterectomy. The condition of the cervix and its mobility are usually the determining points. It has been our experience that in some cases of pelvic inflammatory disease, total abdominal hysterectomy is indicated, and in some it is much wiser to perform supracervical hysterectomy. For example, occasionally the induration in the parametrium is so firm and the cervix so fixed that it becomes too dangerous a procedure to effect removal. Also, where there have been repeated drainages through the posterior cul-de-sac, fixation may result subsequently which would produce a condition that would make total hysterectomy a very difficult procedure. However, I think it can be safely said that, when pelvic inflammatory disease is present, a better physiologic result can be obtained if the cervix is removed than if it is not removed, since the cervix is always infected in various degrees.

Pyometra is a condition which is best treated by complete hysterectomy, especially if it occurs subsequent to treatment with radium. In this same category is chronic endocervicitis associated with chronic endometritis, which is encountered more commonly after repeated induced abortions than under other circumstances.

Editorial

TAFT-SMITH BILL

THE BILL FOR a national health act proposed by Senator Taft is now dormant, the same as all the other bills of the Congress just adjourned. There is now a period in which these measures may be studied, and the course of action of the next Congress determined. Wagner, Murray, and Dingell have announced the revamping of their bill for re-introduction. Dr. E. J. McCormick, chairman of the Council on Medical Service of the American Medical Association, has invited attention to the need for studying the Taft Bill, and has called upon Michigan for a committee to help in the work. A committee has been appointed and is ready for business. It consists of the editor of JMSMS as chairman, Robert L. Novy, M.D., Detroit, and Joseph Herbert, Michigan State Medical Society general counsel, Manistique.

The principles accepted by the Conference of Presidents of state medical societies still set forth the essentials that must be incorporated in any national health bill that will be at all acceptable to the medical profession. They were largely incorporated in the Taft Bill and will again be the inspiration for the study about to be made before the next session of Congress.

We are glad of this privilege to study this bill in the making, and are still of the opinion so often expressed in these pages that the medical profession should propose a program, not sit back and allow some socially inclined bureaucrat to write the charter of medicine for us.

SURGICAL CONSULTANTS TO THE SECRETARY OF WAR

LAST MONTH WE reported the establishment of a corps of Surgical Consultants in the Medical Department of the army. Some are appointed as general consultants for the whole army and others are appointed for certain regions. Some are also appointed, or are being appointed for the army general hospitals. One appointment was announced for Percy Jones General Hospital.

These appointees have to be certified by their specialty boards, as one requirement, and also must be veterans. In June, one of our members received an invitation to become one of the consultants for Percy Jones General Hospital. He was flattered, and filled out several pages of questionnaire. After a short time he had a letter from a department of the Surgeon General's office saying he would be appointed, but since he was receiving compensation for a disability from the last war he would be paid at the rate of twenty dollars a day instead of the customary forty.

The doctor protested that if his services were of value he should be paid for them and not be cut half price because of his war service. The reply was still a request to serve at the reduced rate, stating that there is a federal law preventing those receiving compensation being paid the full amount of their services. The letter said attempts are being made to have that law amended.

We have reported this fact for the benefit of many of our doctors who served in this war and may have been sufficiently disabled to warrant partial compensation. There will probably be many of our members in this group, and they should certainly be paid in full by the government, instead of having their services rated at one-half price.

In fact, any patriot who so well served his country that he is now considered disabled by his government should be rewarded by MORE than the regular amount paid for services in these circumstances.

MEDICAL CARE OF VETERANS

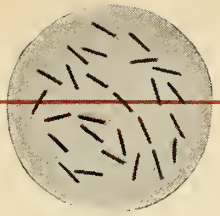
FROM MARCH 1, 1946, until August 31, 1946, Michigan Medical Service had been authorized to furnish 14,140 rating examinations and 14,801 treatments to veterans, making a total of 29,941 cases. The work did not get into full swing until April, and during the month of July nearly 10,000 cases were handled. On August 31 the Veterans Administration owed Michigan Medical Service $147,000, for services for which Michigan Medical Service had paid the Michigan doctors.

The reports which come in from the doctors are very satisfactory on the whole. We do find however, that in some cases they do not give sufficient information on these reports to satisfy the rating board, in which cases Michigan Medical Service must write the doctor and ask for more de

(Continued on Page 1362)

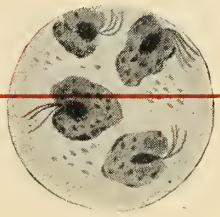
at what pH

do vaginal organisms thrive ?



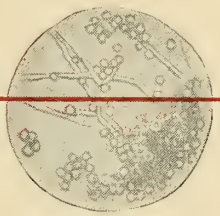
pH 3.8 to 4.4

NORMAL PROTECTIVE DÖDERLEIN BACILLUS



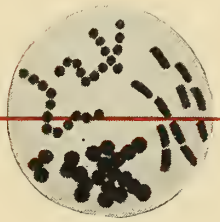
pH 5 to 6

TRICHOMONAS VAGINALIS



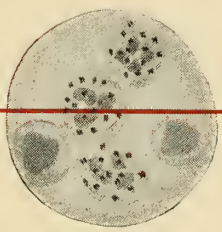
pH 5.5 to 6.8

MONILIA ALBICANS



pH 5.8 to 7.8

STREPTOCOCCUS, STAPHYLOCOCCUS, ESCHERICHIA COLI



pH 6.8 to 8.5

GONOCOCCUS

The Floraquin treatment of vaginal leukorrhea accomplishes rehabilitation of the vaginal mucosa.

Since the common vaginal pathogens require a pH of 5.0 or above, and the favorable pH for the protective Döderlein bacillus is below 5.0, Floraquin is acidulated to produce an average vaginal pH of 4.0 to 4.4.

Floraquin contains the nontoxic protozoacide, Diodoquin, which effectively destroys Trichomonas vaginalis.

In addition, Floraquin supplies lactose and dextrose for absorption by the vaginal mucosa and conversion to glycogen, an important aid in the restorative treatment.

Floraquin and Diodoquin are the registered trademarks of G. D. Searle & Co., Chicago 80, Illinois.

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

(Continued from Page 1360)

tails. There have been only a few of these cases, and this number is diminishing as the plan continues in operation. There has also been some difficulty in the treatment where the doctors rendered services other than those shown on the authorization. The rule on treatment is that only the service which is authorized can be rendered, and that must be rendered during the calendar month of authorization. The service authorized is indicated by the key number on the Uniform Fee Schedule.

This brings up the whole question of the care of the veteran as being attempted now and the way it was done after the other war. When service connection is once established why cannot the administration allow the doctor and the patient to clear up the condition? After the last war these cases dragged along for years, and there never was satisfaction. If the rule could now be to take care of the sick veteran, and clear the books, there would be much more satisfaction with both the veteran and the doctor, who now is frustrated in trying to give the best medical service of which he is capable by being handicapped by delays and failure of issuing authorization.

The department is probably fearful that there might be some chiseling, and, in trying to prevent that, is delaying needed care by red tape. We could give names and cases where weeks have intervened between request for examination or treatment, and the authorization. Michigan Medical Service in servicing its 29,000 cases has found cases where the doctor and the patient have turned in unused authorities, as not needed. We believe the average American is honest, and the physician, also.

A principle of government is expressed by Abraham Lincoln in his second inaugural address: "TO BIND UP THE NATION'S WOUNDS; TO CARE FOR HIM WHO SHALL HAVE BORNE THE BATTLE, AND HIS WIDOW, AND HIS ORPHAN—TO DO ALL WHICH MAY ACHIEVE AND CHERISH A JUST AND LASTING PEACE AMONG OURSELVES AND WITH ALL NATIONS."

Let medicine have its way and this shall be done, just as our martyred president said on March 4, 1865. Bind up the nation's wounds—care for him who shall have borne the battle—NOW, not after weeks of bureaucratic bungling and wasted time. The soldier needs attention NOW.

ON THE RUN

Cardiac enlargement and hypertension exert an adverse effect on the prognosis in angina pectoris.

* * *

Among 10,431 U. S. Navy personnel who acquired filariasis in the South Pacific in 1942, only an occasional man now manifests any signs or symptoms of the infection.

* * *

Intravenous globin in chronic glomerulonephritis produces profuse diuresis and an increase in total circulating protein.

* * *

A positive single nasal smear showing eosinophiles is indicative of allergy but a negative one does not rule it out.

MICHIGAN HOSPITAL SURVEY REPORT

(Continued from page 1310)

4. That hospitals conduct educational programs designed to show the advantages of caring for communicable disease in the general hospital and to achieve public acceptance of such procedure.

Standards of service to be maintained in hospitals, regardless of size, should meet the standard for hospitals developed by the American College of Surgeons. All institutions which provide overnight bed care to the sick should be licensed to operate and should be subject to inspection by a state authority.

It is recommended:

1. That there is a formal medical staff organization in all hospitals.

2. That the medical staff prescribe and enforce standards for membership.

3. That the medical staff maintain vigilant supervision and continuing evaluation of the quality of medical care in the hospital.

4. That the medical staff adopt rules and regulations governing the conduct of professional service.

5. That definite liaison arrangements to be made among the managing board, the administrator, and the medical staff for the discussion of professional affairs and the establishment of administrative and professional arrangements.

Schools for nurses should be organized on a sound educational basis, and it is best for all schools to be organically related to colleges or universities. As that cannot usually be achieved, it is recommended that schools of nursing be conducted only by large hospitals.

There should be a minimum of 15,000 persons living within a radius of not more than thirty miles in order to justify the construction of a hospital of fifty-bed capacity, which is deemed to be the smallest unit in which adequate service can be provided and which can be operated economically.

This report is 231 pages plus numerous tables, and will be further analyzed as time permits. It is very inclusive, shows much hard work and much time in analysis of data assembled.

FACTS ABOUT THE PREPARATION OF



Campbell's STRAINED BABY SOUPS

Q. How are meats prepared for the soups?

A. The full protein and other nutritive values in meat are available only when the meat solids as well as the juices of meat are used. Campbell's method of comminuting the meat—superior to the "scraping" common in home use—assures that all the edible solids as well as all the juices are included. Four of the Campbell's Strained Baby Soups have a meat base: Chicken, Liver, Lamb and Beef.

Q. How are vegetables prepared for the soups?

A. Both the flavor and the nutritive values of vegetables naturally depend in great part upon the way they are handled and cooked. Campbell's have developed a method, based on the latest scientific knowledge, which retains the minerals and efficiently conserves the vitamins, as well as the wholesome natural flavors.

Q. How early may these soups be started?

A. That depends entirely upon the individual baby and the physician's judgment. However, these soups are intended for use as early as any strained baby food. The soups are not seasoned (except for light salting) and are of smooth texture and uniform consistency. A comprehensive analysis of each soup may be had upon request to Campbell Soup Company, Camden, New Jersey.

5 KINDS:

CHICKEN
BEEF
LAMB
LIVER
VEGETABLE

All in Glass Jars



Campbell's Strained Baby Soups represent fine quality . . . in ingredients . . . in care and method of cooking . . . in retention of minerals and conservation of vitamins . . . *and in good flavor.* Every resource of Campbell's Kitchens is devoted to that aim.



LOOK FOR THE RED-AND-WHITE LABEL

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

WESTERN MICHIGAN DIVISION LABORATORY IS TWENTY YEARS OLD

The Michigan Department of Health's Western Michigan Division Laboratory in Grand Rapids observed its twentieth anniversary in September. Pearl Kendrick, Sc.D., who has been in charge of this laboratory since it opened, reported that in the last fiscal year tests performed in this laboratory reached the all-time high of 301,722. Diagnostic tests were made for 677 physicians in the twenty-eight county area which this laboratory serves.

USE OF PLASMA RISES 68 PER CENT

Dr. A. B. Mitchell, medical director of Michigan's blood plasma program, reports that in the first six months of 1946 use of plasma increased 68.5 per cent over the previous six-month period. He attributes part of this rise to the return of Michigan physicians to civilian practice. The greatest increase in plasma use was in small institutions. Counties having fewer than 100 hospital beds increased their use of plasma 117.5 per cent; counties having between 100 and 200 hospital beds increased 81 per cent, while counties with more than 200 beds showed a 49.2 per cent increase.

In the first six months of 1946 the Michigan Department of Health Laboratories distributed 9,654 units of plasma compared to 5,730 units in the previous six-month period. The number of patients receiving plasma increased from 2,758 during the last half of 1945 to 3,422 in the first six months of 1946.

Local chapters of the American Red Cross recruit blood donors and organize blood donor clinics. The plasma is credited to the county from which the blood was obtained and distributed through local hospitals. Seventy-five counties are now participating in the plasma program which began in September, 1943. A total of 151 hospitals in these counties serve as distribution centers. In these counties blood plasma is available, without charge, to any patient who, in the judgment of his physician, needs it.

INFORMATION REGARDING APPLICATIONS FOR EMIC

As previously stated in the Journal, a woman is eligible for maternity care under the Emergency Maternity and Infant Care program if at some time during her pregnancy her husband was in one of the four lowest pay grades of the armed forces of the United States. In considering for approval such applications for care, the Michigan Department of Health has been advised by the Children's Bureau to approve those applications in which the estimated date of confinement, as indicated by the physician requesting the authorization, is *less* than 280 days after the date of discharge or promotion of the husband.

MICHIGAN BIRTHS, DEATHS AND MARRIAGES

Births, deaths and marriages all increased in Michigan during the first seven months of this year.

January through July

	1946	1945	Per Cent Increase
Births	68,591	63,348	8.3
Deaths	32,513	31,209	4.2
Marriages	43,250	23,090	87.3

PUBLIC HEALTH CONFERENCE

The twenty-sixth annual Michigan Public Health Conference is scheduled for the Hotel Pantlind, Grand Rapids, October 30, 31, November 1.

NEWS OF PERSONNEL

Donald B. Harris, M.D., of Sioux City, Iowa, has been appointed health officer for the Chippewa County Health Department, effective September 1, 1946. Dr. Harris replaces Dr. Harvey Harrington who has been acting director for that department since March 16, 1945.

Roelof Lanting, M.D., has been appointed director of the Lansing City Health Department, effective September 1, 1946. He succeeds Floyd R. Town, M.D., who has resigned after four years as Lansing health officer. Dr. Lanting comes to Lansing from the Shiawassee County Health Department.

Helen Lanting, M.D., became associate director of the Bureau of Maternal and Child Health on August 10, 1946. Dr. Lanting was director of District Health Department No. 7 from January, 1941, to March, 1943, and Director of the Shiawassee County Health Department from March, 1943, to December, 1945.

INCIDENCE OF COMMUNICABLE DISEASE

Disease	August, 1946	August, 1945	Seven-year Median
Diphtheria	32	21	12
Gonorrhea	1135	1276	851
Lobar pneumonia	42	54	84
Measles	173	172	172
Meningococcic Meningitis	9	18	9
Pertussis	980	553	1096
Poliomyelitis	323	47	60
Scarlet fever	112	213	144
Syphilis	1457	1177	1177
Tuberculosis	549	475	553
Typhoid fever	20	7	15
Undulant fever	9	19	10
Smallpox	0	2	1

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our ALCOHOLIC treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

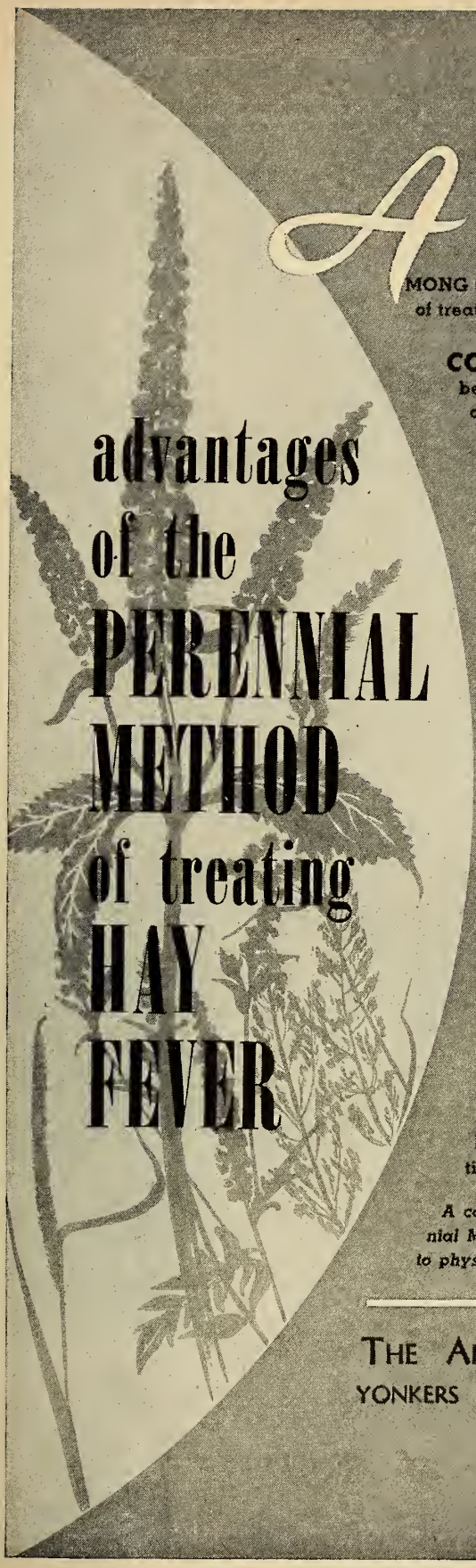
MENTAL patients have every comfort that their home affords.

The DRUG treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.

Telephone—Highland 2101



advantages of the PERENNIAL METHOD of treating HAY FEVER

AMONG the advantages of the perennial method of treating hay fever are:

CONVENIENCE. Perennial treatment may be started at any time during the year and it is often more convenient for the patient to come to the physician's office at less frequent intervals than is necessary during preseasonal and coseasonal treatment.

EFFECTIVENESS. Greater probability of permanent immunity with this method than with either the preseasonal or coseasonal method.

SIMPLICITY. The perennial method is the one of choice where symptoms of hay fever continue through more than one season. In treating such cases, pollens of all seasons during which the patient is affected may be combined without loss of effectiveness.

CONTROL. This method also enables the physician to keep a much closer check on the patient's general physical condition throughout the entire year.

Physicians may order a complete diagnostic pollen set for testing any individual patient for $1.00 irrespective of the number of pollen allergens it is necessary to include. In ordering these sets, dates of onset and termination of attack are required.

The staff of the Biological Division will be most happy to extend their cooperation and suggestions on any of your allergy problems.

A copy of the treatise, "Advantages of the Perennial Method of Treating Hay Fever", will be sent to physicians upon request.

THE ARLINGTON CHEMICAL COMPANY
YONKERS 1 NEW YORK Arlington

What's What

Gertrude D. C. O'Sullivan, M.D., Mason, recently celebrated fifty years in the practice of medicine.

* * *

Johnston Optical Company, Detroit, has moved to the eighteenth floor of the Industrial Bank Building, Detroit. The entire floor is being utilized.

* * *

Correction. Willard Boyden Howes, M.D., Detroit, was omitted from the roster of members published in the July issue of the JOURNAL.

Apologies!

* * *

John Alexander, M.D., and Francis X. Byron, M.D., Ann Arbor, are authors of an original article "Thoracic Aneurysm" which is published in the JAMA issue of September 7.

* * *

A Hillsdale physician, moving to California, offers to sell his office equipment and to rent his well-located office space. For details write H. C. Miller, M.D., Hillsdale.

* * *

Wm. A. Hyland, M.D., Grand Rapids, president of the Michigan State Medical Society, was appointed on September 1 as chairman of the Board of Directors of the Michigan Division, American Cancer Society, and also chairman of its Professional Executive Committee by Leslie B. Butler, Lansing, president of the Cancer Society.

* * *

From a senior in the Medical School, University of Michigan: "I want to thank you for sending me the Michigan State Medical Society JOURNAL. I really do appreciate it and I am sure that the others in our senior class here at the University of Michigan do also."

* * *

"The state collected a record of $2,373,000 from horse racing this year."—Michigan Survey, August 27, 1946.

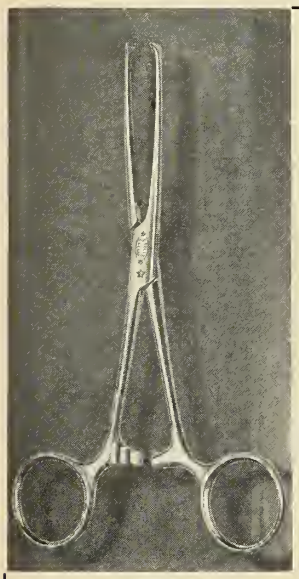
Isn't gambling and making a profit therefrom a crime? At least, certain grand juries have been known to indict gamblers!

* * *

The AMA House of Delegates will hold its mid-year session in Chicago, Monday, Tuesday, Wednesday, December 9-11, 1946.

The annual conference of state secretaries and editors will be held at the offices of the AMA, Chicago, Saturday and Sunday, December 7 and 8, 1946.

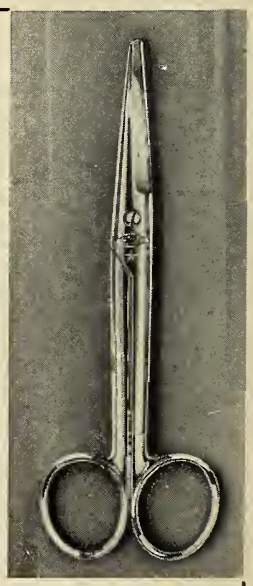
(Continued from Page 1372)



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(Continued from Page 1368)

Wm. A. Hudson, M.D., Detroit, was elected regent for District No. 6 (Michigan and Ohio) and Willard B. Howes, M.D., Detroit, was elected governor for Michigan at the recent annual meeting of the American College of Chest Physicians, held at San Francisco.

* * *

Harrison S. Collisi, M.D., Grand Rapids, has been named manager of Crile Veterans Administration Hospital, Cleveland. He was former chief of the out-patient division at the Columbus headquarters of the Veterans Administration. Dr. Collisi was separated from the army Medical Corps as a colonel last March after four years' service.

* * *

Letters: From a military member, recently separated from service: "I wish to thank you for keeping me as a member of the Michigan State Medical Society for the five years I was in Military Service. Also I wish to thank you for sending me the JOURNAL of the Michigan State Medical Society for the three and a half years I spent overseas."

* * *

"Doctor's Day" was observed during a recent Rogers City homecoming, to honor particularly N. C. Monroe, M.D., W. R. Arscott, M.D., B. G. W. Larke, M.D., and S. H. Rutledge, M.D., all of Rogers City. These veteran practitioners have served the community of Rogers City for many years. The celebration was sponsored by the Lion's Club.

* * *

The American Association for the Study of Goiter again offers a prize award of three hundred dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The competing essays must be presented in English not later than January 1, 1947, and sent to the corresponding secretary, T. C. Davison, M.D., 207 Doctors Building, Atlanta 3, Georgia.

* * *

"Doctors Now and Then" is the title of the 1947 radio program of the American Medical Association, to be broadcast over the NBC networks. The series will make comparison between doctors and medicine today and health situations which existed during the past 100 years. Where possible, the comparisons will be made on a regional basis, with an historically outstanding physician in each region being selected (such as William Beaumont in Michigan).

* * *

Two new courses have been added to the Wayne University College of Medicine's Postgraduate Continuation curriculum:

1. Internal medicine course in "Allergy Clinic and Conference" (limited to 4) at Receiving Hospital, Tuesdays from 8:00 to 11:00 a.m. This course began October 1 and will run through December 31, 1946.
2. A course in "Survey of Medical Chemistry" given at the College of Medicine on Thursdays at 5:00 p.m. beginning October 28.

(Continued on Page 1376)

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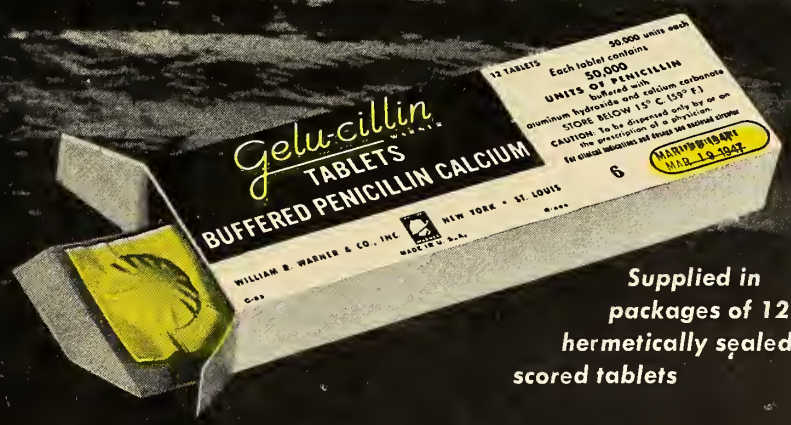
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(Continued from Page 1372)

H. H. Riecker, M.D., Ann Arbor, was guest speaker at the state-wide rehabilitation program during the week of October 7-14 known as "Employ the Handicapped Week."

Dr. Riecker spoke on Friday, October 11, at the session covering the topic of "Cardiac Disabilities." His subject was "Rheumatic Fever and Heart Ailments, Causes, Effects, and Care." The "Employ the Handicapped Week" was under the sponsorship of the Michigan Rehabilitation Association, Lansing.

* * *

L. Fernald Foster, M.D., Bay City, secretary of the Michigan State Medical Society, and H. H. Riecker, M.D, Ann Arbor, assistant professor of postgraduate medicine, University of Michigan, were guest speakers at the annual meeting of the Michigan Society for Crippled Children and Disabled Adults, Friday, November 8, at the Morton Hotel, Grand Rapids. Dr. Foster's subject was "Michigan's Rheumatic Fever Control and Cardiac Program"; Dr. Riecker spoke on "Medical and Social Aspects of Rheumatic Fever."

* * *

Closing Date May 15, 1947. The $34,000 prize contest for physicians' art work on the subject of "Courage and Devotion Beyond the Call of Duty" will be judged at the Atlantic City Centennial Session of the AMA at Atlantic City June 9-13, 1947.

Art works on other subjects may also be submitted for the regular cups and medals.

For full information, write Dr. F. H. Redewill, Secretary, American Physicians Art Association, Flood Building, San Francisco, Calif., or to the sponsor, Mead Johnson & Company, Evansville 21, Ind., U.S.A.

* * *

A member of the New Zealand medical profession visiting in Detroit recently said that in New Zealand the government levies income taxes on all income in excess of $9,000 of 87.5 per cent of the gross. He was a government official and favored the present plan for medical service there. Before 1935 he says the average income of doctors was $2,100 net. Now under the present government plan it is $12,000 gross and about $7,500 net. Doctors may do private practice and make whatever charges they wish, but the income tax provision tends to limit such charges. Hospital pay is inadequate, but the hospitals do not worry much because they have the privilege of charging taxes on the community for their deficits.

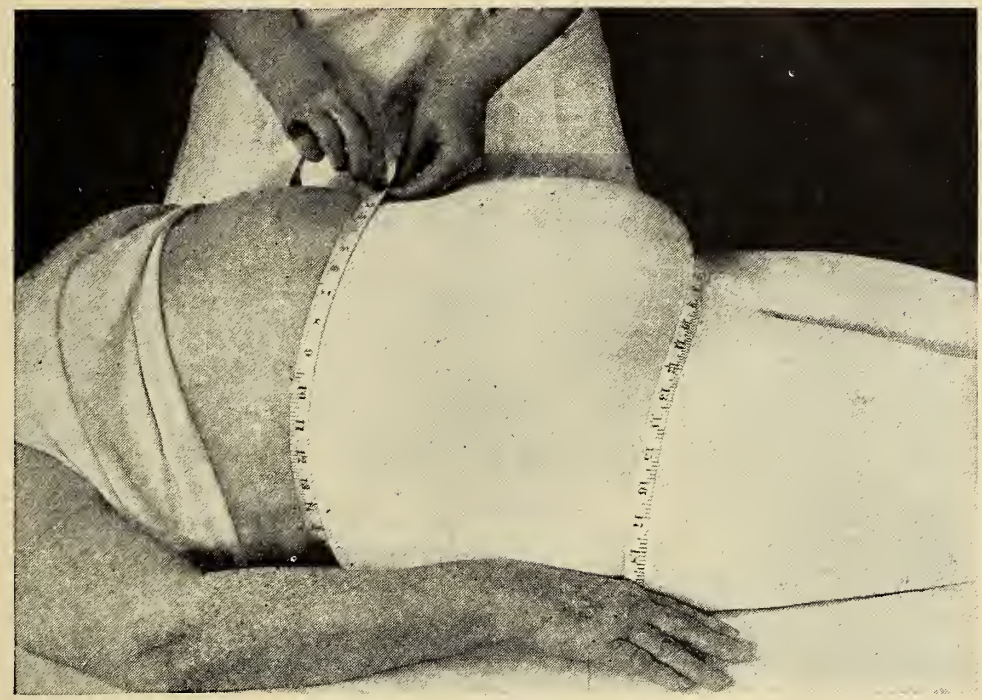
* * *

"For the next decade American medicine must rely for its very life upon well-ordered and conservative organization. This is also true for American democracy in general. Until the menace to our way of living is removed at the polls, an alert and well-functioning organization is the only safeguard to our existence. Organized medicine must have the enthusiastic co-operation and support of its membership."—Editorial, *The Bulletin,* Genesee County Medical Society, September 17, 1946.

(Continued on Page 1380)

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(Continued from Page 1376)

"Five Thirty Five" is the name of a new house organ published for and by the employes of the American Medical Association in Chicago. Various departments make this an interesting and informative medium for the 600 or more employes at the AMA. In the August number (the second month of the publication of *Five Thirty Five*) the telephone as an adjunct to business is treated. The story points out many tricks necessary to creating good will so necessary to good business. "Thousands of miles are spanned by the telephone," says the article. "It is a sensitive instrument—answer its ring promptly —bring your caller close to you. A pleasant voice can make a friend. Smile into the phone—it will make your voice smile. Keep your voice light. Be courteous. Don't let a person wait for information—suggest returning the call. It will save his time and yours. The person at the other end called for service—give it to him."

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* * *

Hardy A. Kemp, M.D., dean of the Wayne University College of Medicine, has been appointed expert consultant to the Secretary of War in the field of tropical diseases.

Consultative relationships with the Army Medical School in instruction and research fields as well as advisory work with the army Surgeon General were requested and will be provided in connection with the appointment. Dr. Kemp, who holds a colonel's rank in the Officers' Reserve Corps, served four years in the army in the present war, two of these years being devoted to work in the tropics.

(Continued on Page 1384)



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(Continued from Page 1380)

Before entering the army, he was dean of the Ohio State University medical school and previously had served on the faculties of Baylor University and the University of Vermont. At the time of his appointment to the Wayne position last summer he was secretary of the Army Medical School.

* * *

Council and Committee Meetings.

1. Commission on Health Care (a committee of the House of Delegates), Detroit, September 4.
2. Child Welfare Committee, Lansing, September 11.
3. Committee on Rheumatic Fever Control, Lansing, September 12.
4. The Council, Detroit, September 22 and 26.
5. Commission on Health Care, Detroit, September 22.
6. Publication Committee of The Council, Detroit, September 23.
7. County Societies Committee of The Council, Detroit, September 23.
8. Rural Health Committee, Detroit, September 23.
9. Committee on Infectious Diarrhea, Detroit, September 26.
10. Executive Committee of The Council, Jackson, October 16.

* * *

Michigan law relative to sale of medicines to create abortion. Some doctors of medicine may not realize that a law covering the sale of medicines sold to create an abortion is on the statute books of Michigan. This is Act 328 of the Public Acts of 1931, which provides, in part: "Selling drugs, et cetera, to produce abortion. Any person who shall in any manner except as hereafter provided, advertise, publish, sell or publicly expose for sale any pills, powder, drugs or combination of drugs, designed expressly for the use of females for the purpose of procuring an abortion, shall be guilty of a misdemeanor.

"Any drug or medicine known to be designed and expressly prepared for producing an abortion, shall only be sold upon the written prescription of an established practicing physician of the city, village, or township in which the sale is made; and the druggist or dealer selling the same shall, in a book provided for that purpose, register the name of the purchaser, the date of the sale, the kind and quantity of the medicine sold, and the name and residence of the physician prescribing the same."

* * *

The name of J. Lewis Dill, M.D., Detroit, was inadvertently omitted from the Roster of Members published in the July issue of THE JOURNAL.

The names of *Leo Bunce, M.D.,* Trufant and *J. D. Snider, M.D.,* Ionia, both military members, were omitted from the Roster of Members through error, also.

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*Cohen, A., Trommer, P., and Goldman, J., J.A.M.A., 130:265, 1946.

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Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

DISEASES OF THE SKIN—For Practitioners and Students. By George Clinton Andrews, A.B., M.D., Associate Clinical Professor of Dermatology, College of P. and S., Columbia U.; Chief of Clinic, Dept. Dermatology, Vanderbilt Clinic; Chief of Dermatology Clinic, Roosevelt Hosp; Attending Dermatologist to Presbyterian Hosp. and Roosevelt Hosp.; Consulting Dermatologist and Syphilologist to Tarrytown Hosp.; Grasslands Hosp., Valhalla, St. John's Hosp., Yonkers, Greenwich Hosp., and the Beekman-Downtown Hosp.; Fellow of the American Medical Association, of the American College of Physicians, and the New York Academy of Medicine; Member of the American Dermatological Association, the American Radium Society, the New York Dermatological Society, New York Roentgen Society, and the Manhattan Dermatological Society; Member of the Deutsche Dermatologische Gesellschaft and Corresponding Member of Societe Francaise de Dermatologe et de Syphiligraphie. Third Edition. 937 pages with 971 illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price $10.00.

A third edition has made it possible for Dr. Andrews to include in his textbook on diseases of the skin the very latest knowledge of skin diseases all over the world. Sulfonamides, penicillin and streptomycin have helped to revolutionize treatment. Shock-proof x-ray machines and contact therapy machines that deliver 16,000 roentgens per minute are the very latest development. These things are all discussed in their application. Chapters have been added to help the candidate for the American Board of Dermatology; this is a new feature for a textbook, but a valuable one. It is also a recognition of the value of the American Boards in every field which they

(Continued on Page 1400)

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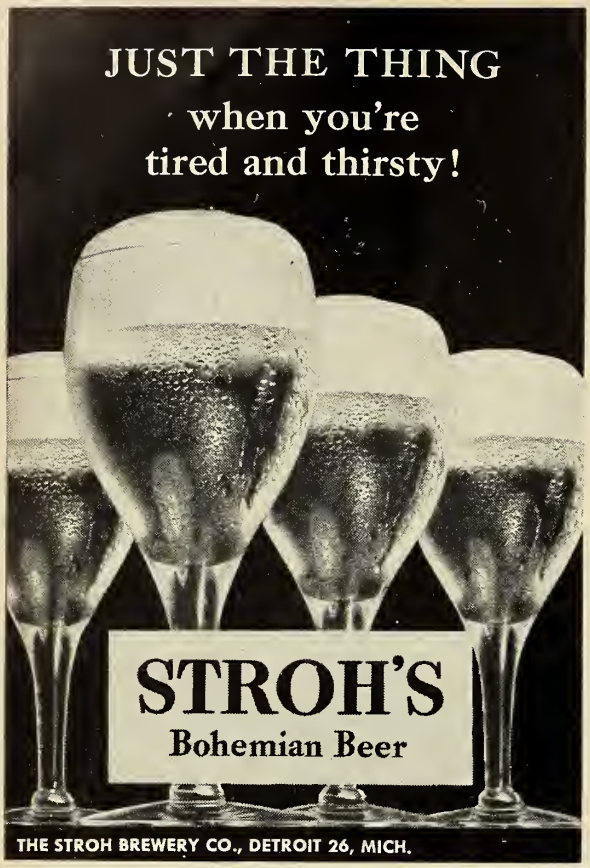
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(Continued from Page 1398)

cover. Prescriptions throughout have been written in the metric system, and mostly in Latin. Many new illustrations are published and the text is unusually well and completely illustrated. Eczema is considered largely as an allergy, and cautions are given that scratch and other tests will not indicate the cause. Elimination diets are usually necessary. Each chapter is followed by a half page or more of references. This text is most complete and valuable for the student or for the well-advanced dermatologist.

SCIENCE MARGARINE NUTRITION. Lawrence C. Salter and Associates. Washington: The National Association of Margarine Manufacturers, 1946.

Margarine as a food has been misunderstood. This little pamphlet summarizes some of the scientific facts about margarine in the interests of good nutrition. These facts will remove some of the obstacles to freer use of this fat, and will thus help to raise the nutritional standards of the American people.

RENAL DISEASES. By E. T. Bell, M.D., Professor of Pathology in the University of Minnesota, Minneapolis, Minnesota. Octavo, 434 pages, illustrated with 115 engravings and 4 colored plates. Philadelphia: Lea & Febiger, 1946. Price, cloth, $7.00.

For the past twenty-five years the author has carried on studies on renal diseases, and this book is part of that compilation, written especially for the pathologist and the clinician. The work emphasizes especially the struc-

(Continued on Page 1402)

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(Continued from Page 1400)

tural changes in the kidney. The chapter on hypertension is very complete and up to date. It describes the retinal pictures and different stages of malignant hypertension, also the relative frequency. The etiology and the effect of drugs are extensively discussed. References are voluminous. This book is timely and inspiring.

PERIPHERAL VASCULAR DISEASES. By Edgar V. Allen, B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., Division of Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; Diplomate of the American Board of Internal Medicine; and Nelson W. Barker, B.A., M.D., M.S. in Medicine, F.A.C.P., Division of Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; Diplomate of the American Board of Internal Medicine; and Edgar A. Hines, Jr., M.D., B.S., M.A., M.S. in Medicine, F.A.C.P., Division Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; with Associates in the Mayo Clinic and Mayo Foundation. 871 pages, with 386 illustrations, 7 in color. Philadelphia and London: W. B. Saunders, 1946. Price, $10.00.

George Elgie Brown of the Mayo Clinic was a pioneer in diseases of the peripheral vascular system. He planned this book before his untimely death in 1935, and it has now been completed and is in a way a memorial to him. The staff of editors and contributors are all from the Mayo Foundation or the Mayo Clinic, and the material in this book is largely compiled from those sources. This field overlaps many others, and so has contributors from many fields in medicine. Arterial hypertension and vascular diseases of the central nervous system have not been included. As a sample of the detail in this book, a chapter of forty pages is devoted to the effects of tem-

(Continued on Page 1404)



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(Continued from Page 1402)

perature on the vascular system, and then thirty-nine references are given at the end of the chapter. The whole book is replete with detailed studies and remarkably pat illustrations. The references following each chapter are full and valuable. The last two chapters on medical treatment and surgical treatment are complete and in detail. This book is a must in any library, and for the practitioner it contains the answer to his problem.

MODERN DRUG ENCYCLOPEDIA AND THERAPEUTIC INDEX. Edited by Alexander B. Gutman, Ph.D., M.D., F.A.C.P., Assistant Professor of Medicine, College of Physicians and Surgeons, Columbia University, New York, N. Y., Associate Attending Physician, Presbyterian Hospital, New York, Associate Attending Physician Vanderbilt Clinic, New York. Third Edition. New York: The Yorke Publishing Company, Inc., 1946.

This book is intended for the desk and lists alphabetically most of the pharmaceuticals offered for use of the medical profession. Each drug is described, giving the composition, or description, action and uses, administration, caution and supply. Where it can be given the chemical formula is also supplied. Chapter 11 treats biologicals in the same way. Allergens have a chapter, and a section of the book lists the pharmaceutical manufacturers and under each name their preparations with a page reference. Nothing is said of the approval by New and Non-Official Remedies of the AMA.

REVIEW OF THE FIGHT AGAINST TUBERCULOSIS IN WISCONSIN AND ELSEWHERE. By Gustav Schmitt, M.D., Milwaukee, Wisconsin. 1898-1946. Milwaukee: The North American Press. Compliments of the Author.

We have received this monograph of eighty pages. It is a chronology of the fight against tuberculosis made by the author. He tells what he found in 1898 and gives his first plea for intervention in the treatment of the disease in February, 1901. The fight is followed down to the present time. A very interesting monograph.

A BRIEF HISTORY OF MEDICINE. By Herbert E. Randall, M.D. Reprints of articles published in the Bulletin of the Genesee County Medical Society. Privately printed. Flint, Michigan, 1946.

For many years Dr. Randall, a former president of the Michigan State Medical Society, has been interested in the great leaders in medicine, and has been publishing essays about them. He has gathered them all into one very interesting book. Included are essays on Hippocrates, Galen, Paracelsus, Vesalius, Harvey, Pare, Hunter, Bernard, Pasteur, Koch, Sydenham, Bright, Verchow, and others; also discussions of Italian, Chinese, Russian, Japanese, German, French Medicine; Medicine in the British Isles, in the United States, in Canada.

TRANSVISION ANATOMY OF THE HEAD STRUCTURES INVOLVED IN PROBLEMS OF ORAL PROSTHESIS. Wernet. Jersey City: The Wernet Dental Mfg. Co., 1946. Price, $1.00.

A long-felt need in the dental field is filled by this anatomical atlas made up of excellent color plates mounted on transparent pages similar to cellophane. It gives a three-dimensional effect. The right-hand pages show the structures from the skin inwards layer by layer of the right side of the head. The left-hand pages show from the inside looking outward the structures of the left side of the head. This is beautifully done and most practical.

THE STATUS OF FOOD ENZYMES IN DIGESTION AND METABOLISM. By Edward Howell. Chicago: National Enzyme Company.

This little book contains much information on the nature and amounts of enzymes as they occur in the body and in nature. Enzymes, unlike vitamins, are destroyed by heat. Pasteurizing destroys most of them. The enzyme-producing organs of man are much larger than those of the animals, and the change from raw foods to cooked ones has made changes in the human metabolism. There are many tables, and much descriptive material. A summary and conclusions complete the book.

WOMANHEALTH. A brief manual of medical information of interest to women. Linden, N. J.: The Ortho Pharmaceutical Corporation, 1946.

Here is a small booklet all about the life and functioning of the female organism. It answers the questions many intelligent women hesitate to ask. It discusses the changes that take place at puberty, discusses childbearing and infertility, and describes the disorders of the female organs in a clear non-technical manner. It is educational and reassuring, and is written for lay distribution.

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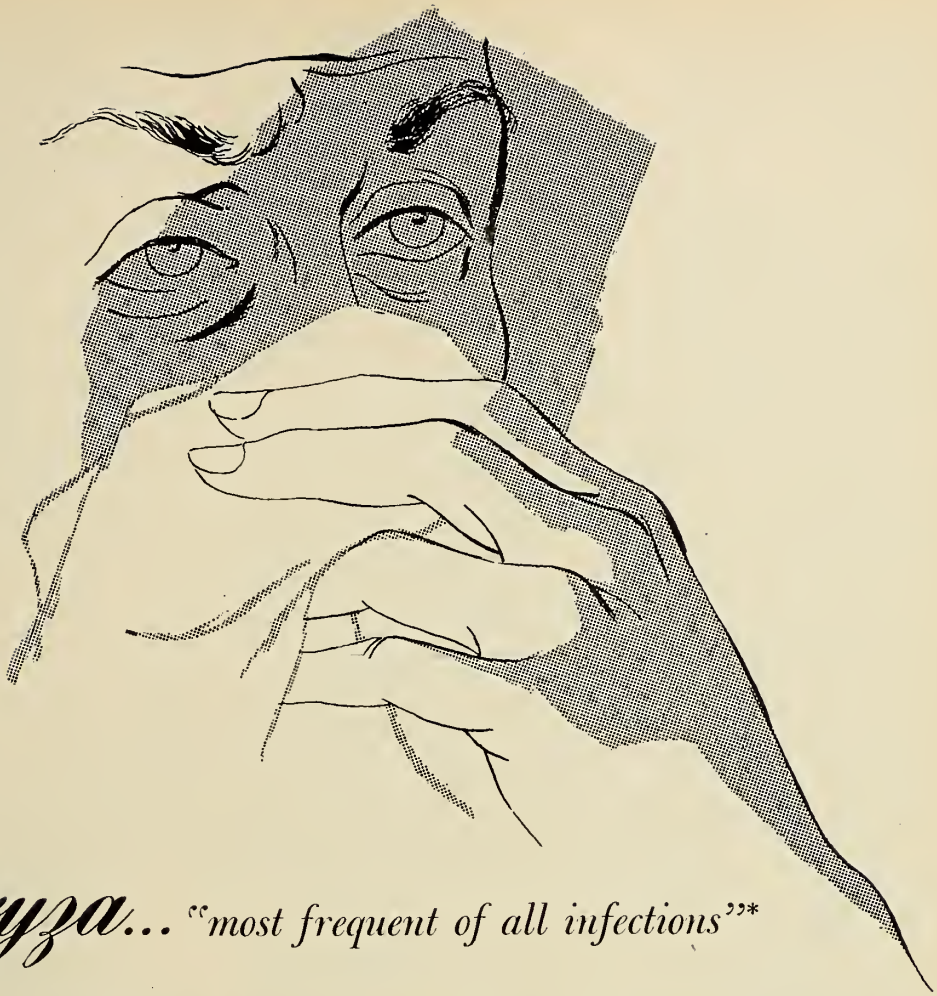
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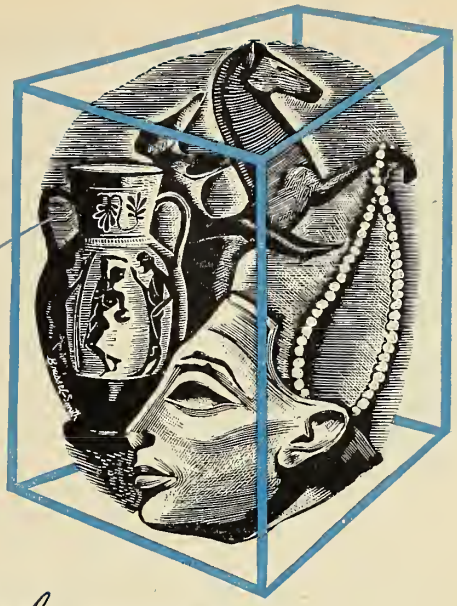
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The Government in Medicine

By Senator Robert A. Taft



Senator Taft

It is a great pleasure to me to come to Detroit to address the medical society of this county. For the first time since the war began, Congress is enjoying a real recess, and I welcome the opportunity to tell people throughout the country something of the legislative problems in Washington and hear directly what their opinion is regarding those problems. In these days when governmental issues cover the entire field of social and economic activity, it is almost impossible for a Congressman to do his duty properly in Washington. He should be required to spend several months every year back in his District, if he is really to represent the people who elect him.

Federal Health Activities

You are interested, of course, in the legislation proposing increased Federal action in the providing of medical care to the people of the United States. For many years there have been numerous proposals designed to promote improved medical service throughout the country. The Federal government is already engaged in research in connection with cancer and venereal diseases, the social security act gives assistance to public health work in the states. This year we passed a bill providing Federal aid in the construction of hospitals. We added authority for neuropsychiatric research justified by the problems of the Veterans Administration alone.

Compulsory Insurance Is Socialization

Public interest is now centered on proposals of a much more extensive nature. Long hearings have been held on the so-called Wagner-Murray-Dingell Bill providing a universal compulsory sickness insurance in the United States. Extensive propaganda is being carried on in favor of that bill. Undoubtedly it will be presented to the next session and a determined effort made to secure its enactment. President Truman has officially endorsed it, so that it has become an administrative measure.

The proponents of this bill are studiously attempting to create the impression that it is just a form of insurance similar to life insurance or hospital insurance, or any of the other kinds of insurance with which people are familiar; and that it will not change the character of medical service. But the fact is that this is not insurance. It is a plan for government administration of all medical care, supported by a tax on pay-rolls. There is no difference between a pay-roll tax and any other tax. This can't be insurance if a man has no option except to pay for it. Even the International Labor Office, which is the principal international proponent of sickness insurance, admits that this so-called insurance is not really insurance, or will not remain so for long. In a recent volume entitled *Approaches to Social Security,* it says:

> "The fact is that once the whole employed population, wives and children included, is brought within the scope of compulsory sickness insurance, the great majority of doctors, dentists, nurses, and hospitals find themselves engaged in the insurance medical service, which squeezes out most of the private practice on the one hand, and most of the medical care hitherto given by the public assistance authorities, on the other. The next step to a single national medical service is a short one. . . ."

Obviously, since the tax is based on a percentage of pay-roll, it relates itself to the income of the employe, and not to the service performed. The man with a low income and a number of dependents pays much less for more service than the unmarried man with higher income. This is a principle of taxation, not of insurance.

A compulsory levy of this kind is a tax, because it deprives the employe of his freedom of choice in the spending of money which he earns. The average citizen may choose in making his expenditures with regard to the relative amount he spends on food, clothing, automobile, insurance, saving and medical care. Some people want more of one and less of the other, and in the absence of taxation they make the selection. Some people want more medical care than others. In fact, some people run to the doctor whenever they have the slightest thing the matter with them. Others have a feeling that, except in serious matters, it is a waste of time to see a doctor at all. Probably the wise man is between the extremes. But this system leaves him no freedom of choice. Of course, it encourages applications for medical service every time a man has a cold, and undoubtedly will increase the total work to be done by doctors, which has the effect of decreasing the quality of service. In any event, it cannot possibly be called insurance.

It is, in reality, a plan for the nationalization of our medical service. From three to five billion

(Continued on Page 1422)

Presented to the Wayne County Medical Society, Monday, October 7, 1946, at the Masonic Temple, Detroit, Michigan.

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(Continued from Page 1418)

dollars will pour into Washington. The money will be used by a Federal bureau, with branches in every city and town, to pay all doctors in the United States to render without charge the medical service required by all citizens. The government will have to issue regulations determining circumstances under which men and women are entitled to medical care, when it is to be given in hospitals, when it is to be given in clinics, when it is to be given in the doctors' offices, and when it can be given in the home. Regulations of many kinds are necessary, because obviously the government cannot spend unlimited amounts simply because the patient or the doctor or a combination of the two ask for more care than is reasonable. Regulations must limit the prescription of expensive medicine, x-ray services and the like. Regulations must prescribe whether doctors are paid on a per capita basis or on a service basis, and how much they shall receive. Regardless of form and the protestations of the authors, this bill proposes, first, a socialization of medicine, and, second, a transfer of all control over health activities from the states and local governments to a Washington bureau.

It does not necessarily damn a program to call it socialization. We have long had socialized primary and secondary education in the United States. The government provides all education without cost to the student and supports the expense by taxation. Nearly a million teachers are on the public pay roll. The situation regarding education, however, is very different. The service to be performed can be reasonably adequate in lower grades even if it is practically uniform for all students. A primary education must be compulsory for every boy and girl in the nation, and education through private schools cannot begin to do the job, and never has attempted to do it.

The providing of free medical care presents much more difficult problems than education. Every individual case requires special treatment, and I have pointed out that every individual should have the choice of paying for more or less medical care. Furthermore, the fact that we socialize education—and postal service is another example—cannot be used as a precedent for doing the same in every other field or we would soon have a completely socialized economy. If we are going to give medical care free to all people, why not provide them with free transportation, free food, free housing and clothing, all at the expense of the tax payer? Everyone connected with these services could be made a government employe. After all, socialization is a question of degree, and we cannot move much farther in that direction unless we do wish a completely socialistic state.

Under the proposed Truman plan, practically all doctors would become in effect employes of the Federal government. They would be responsible to the government which pays them and not to their patients who do not. You know better than I whether that would improve medical service, make better doctors, and stimulate progress in medicine. I should think it would have an utterly deadening effect on medical practice.

Should Medical Care Be Socialized?

I do not propose here to analyze existing systems of compulsory health insurance. I have seen no evidence presented that these systems provide as high a standard of medical service as exists already in the United States, nor is there any conclusive evidence that the lowest income groups are better served than here. There are few countries which have tried as general a plan as that contained in the Murray-Wagner-Dingell Bill. As a rule, plans have been confined to special groups, except perhaps in New Zealand where certainly the problem has not been solved.

I am strongly opposed to any socialization, by state or nation, of medical care, except medical care to those unable to pay for it because of their financial condition. But above all, I deplore the federalization of medicine. Medical care has always been a function of the state and local governments. Under our Constitution that is where it belongs, and not in Washington. If the people of a state desire to socialize medicine, that is their privilege. But what possible justification can there be for giving a Washington bureau power to employ all physicians throughout the nation? That has not even been done in education. Our people in each state and each school district have retained complete control over the education of their children and the employment of their teachers. In most states the system has been separated from political government as it could not be under the present organization of the Federal government.

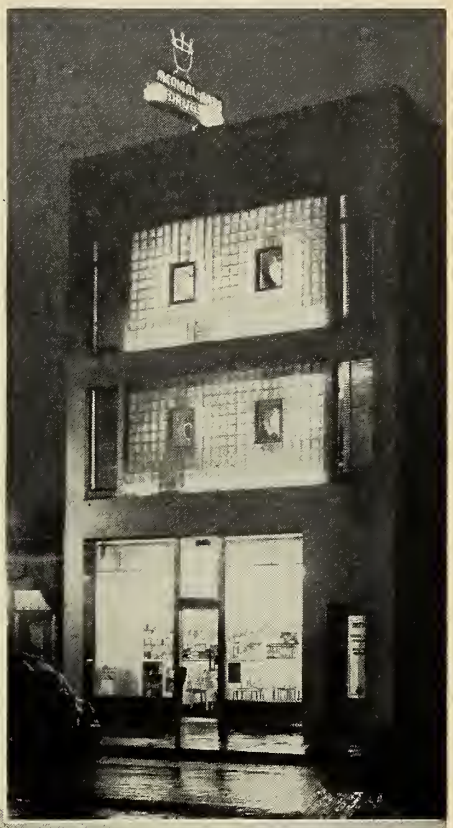
Our experience is that any attempt to regulate the affairs of all the people, of the average citizen in forty-eight states, is usually both tyrannical and inefficient. Conditions in various sections of the country are completely different. No man, certainly no Federal bureaucrat, knows enough to draw regulations which fit all those conditions. If they fit the part of the country he does know, they are likely to be awkward or nonsensical in other areas. Furthermore, the average man has no voice in the operation of a Washington bureau. In his own City Council or State House, he can make himself heard by appearing personally. He can write letters to the newspapers. He can run for office himself and present his program in an election. But in Washington he can't even find the bureau or the man supposed to handle his problems. One of the principal services which Congressmen perform is to save their constituents two or three days tramping through marble corridors. Then when the man is located, the citi-

(Continued on Page 1426)

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(Continued from Page 1422)

zen from Detroit, Michigan, is not likely to get any serious consideration for his problem. Washington is confident of its own superiority, and its general attitude is that the public is "too damned dumb" to understand. Administration by states and local government is generously democratic. Administration by Washington boards and bureaus is tyrannical.

The political patronage involved would be tremendous. It has been estimated that outside of the medical profession it would take anywhere from two hundred and fifty thousand to one million and a half employes to operate the machinery required. More than fifty million cases would have to be checked every year as a basis for payment and statistical information. All Federal bureaus of this nature are notoriously inefficient, expensive and political. The bureau would have to send investigators into every home; and it is hard to conceive of any function which would touch more closely the lives of 140 million people.

Today we have moved far towards a totalitarian state until there is serious danger that our people will utterly lose by measures here at home the liberty for which we have fought two great world wars. This is the underlying issue today in practically all the legislation which comes before Congress. We must determine within the next few years whether we are going to plan our progress along the lines which have made this country the greatest and most powerful nation in the world, according to American principles of liberty and equal justice, or whether we are going to turn over our destiny to a bureaucracy of self-styled experts. I cannot conceive of a measure which will more greatly extend the power of the state, or move further in one jump towards an all-powerful central government, than federal compulsory health insurance.

Is Present Care Adequate?

The justification for this measure lies in the claim that medical service today in the United States is inadequate, and particularly inadequate for the low-income and middle-income groups. Extensive evidence has been offered in the effort to show that such an inadequacy exists, but I am not a sufficient expert to judge the truth of these claims. Certain facts, however, stand out. The health of the United States as a whole is as good as any nation, and better than most. Providing of medical care for individuals is only one of the measures which have an effect on health. Probably more has been done and can be done by preventive measures and the extension of public health work in the elimination of disease and epidemics. Great progress has been made in that field, and I think all those interested are prepared to extend Federal aid so that no state, through financial poverty, shall be unable to carry out all the measures of public health work which can have a substantial effect in preventing illness.

A great deal has been made of the number of rejections in selective service. A careful examination of these causes of rejection, however, will show that very few of these causes would have been removed by the furnishing of free medical care in youth. For the most part, the condition resulted from congenital defects, mental deficiencies or other causes which would not have been affected by more medical care, or not substantially affected.

On the other hand, we must all recognize that from an over-all national standpoint, medical care is not adequate. There are gaps in the service which is rendered. Great as is the charity offered, those unable to pay for medical care undoubtedly fail to get it in many cases where it would be of substantial benefit to them. In the second place there is, in some localities, a lack of hospital and clinic facilities and a serious lack of doctors. This last deficiency has been accentuated during the war, but even in peacetime it is likely that many districts will be unable to secure a physician because of the inadequate return offered. In the third place there is a large number of people in the middle class group who may be able to pay the total cost of necessary health service if spread over the years evenly, but who avoid visits to doctors because of the expense, when they should go and may find themselves unable to pay the cost of an exceptional illness. These gaps in medical service, however, do not justify remedy of nationalizing all medical service.

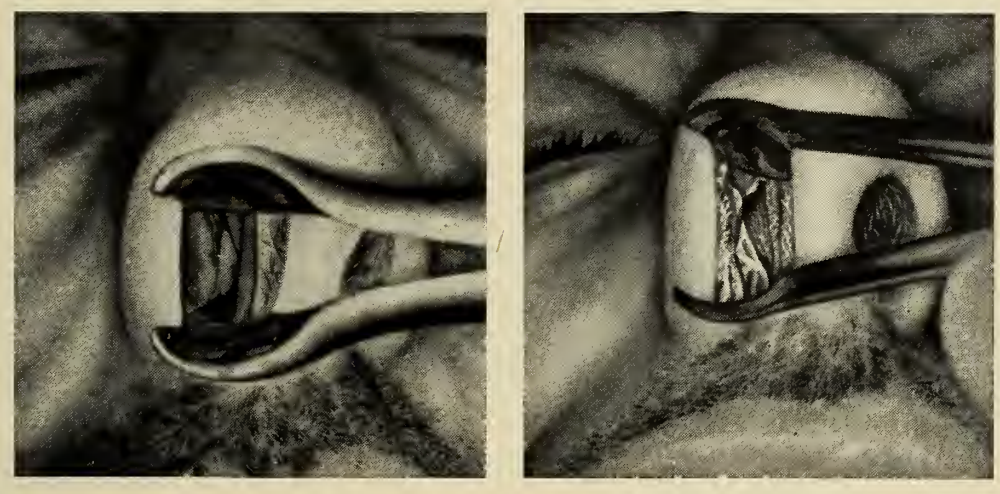
The problem of providing medical care for the poor is not an insurance problem. We have always recognized the obligation of a government to provide free medical care to those unable to pay for it themselves. Nearly all of our cities have general hospitals where such care is freely given. Many localities have public health doctors. All doctors do a large amount of charity work, and there are many charity hospitals. It is true, however, that the work is not systematically organized by all states and local governments and that a more complete system could be stimulated by Federal aid.

The lack of facilities and of doctors would not be directly affected by sickness insurance. It would be more adequately taken care of by Federal aid in the construction of hospitals, and in the subsidizing of doctors where medical practice will not support a decent livelihood.

Public health work and prevention programs would not be enlarged by sickness insurance. I believe that public health work should be extended substantially and supplemented by a more complete inspection of the health of school children in all public and private schools at the expense of the state, so that illness may not result or in-

(Continued on Page 1430)

because it works . . .



(*Left*) **Before administration of Paredrine-Sulfathiazole Suspension:** Turbinates acutely inflamed, highly engorged, and in contact with septum. Air passage completely blocked.

(*Right*) **30 minutes after instillation of Paredrine-Sulfathiazole Suspension:** Turbinates constricted; ventilation and drainage promoted. Infected areas rendered accessible to the sulfathiazole, which is lightly frosting inferior and middle turbinates.

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(Continued from Page 1426)

crease solely from ignorance or neglect in childhood. Legislation should be adopted for federal aid in the removal of pollution from interstate rivers. Federal assistance to research would not be increased by any program of compulsory sickness insurance. It is already well established.

The need for insurance for middle-income groups has not been adequately met, and such insurance is still in an experimental stage. Great progress has been made in the extension of hospital insurance under the Blue Cross plan. Promising experiments in voluntary health insurance are now being promoted by doctors in many states throughout the union, perhaps the best one being that here in Michigan. Certainly anything the government can do to stimulate the formation of such funds should be done. I think it is peculiarly the obligation of the doctors to see that they exist. I do not think it is the function of government to compel men to insure themselves against a possible uneven burden of illness, but I do think that such insurance should be available to those who desire to take it out.

All of the measures I have outlined to meet the real deficiencies in medical service which exist today are entirely feasible without nationalizing the entire medical profession or forcing all of our people to accept state medicine. The Murray-Wagner-Dingell Bill is not an effort in good faith to make our medical service better, but to scrap the present system, and control all medicine and all doctors from Washington.

Super-EMIC Bill

A number of other proposals have been made regarding medical care. No doubt you are familiar with Senator Pepper's bill which, without a pay roll tax, offers free medical care to mothers, and to all citizens under twenty-one years of age. This bill does not even purport to be anything in the nature of insurance. It is simply a proposal that the government at the expense of the tax payer provide free medical care for nearly half of all the service required by the people of this country. At least it is a franker acknowledgment of what the leftwingers are trying to do than the pretense of insurance. Senator Pepper admits it would ultimately cost 2 billion dollars a year. This is in line with the estimates that free medical care for the entire nation on an insurance basis would cost four to five billion dollars a year.

Government Does Have Responsibility

I have stated that in my opinion there is a problem to be met, that there is still a large amount of preventable illness and illness which does not receive satisfactory treatment for the most part among the lowest income and rural groups. I believe that this problem is primarily a problem for the states and local governments and for the medical associations, and that many states are meeting it satisfactorily. Nevertheless, I think the Federal government is justified in taking an interest. Our people feel very strongly, I believe, that a country as wealthy and productive as the United States should be able to prevent all hardship and suffering. Several years ago at Mackinac, I had the privilege of serving on a committee with Governor Dewey and Governor Bricker. We wrote into our resolutions at that time that it was the function of government to prevent hardship and suffering, and secured the adoption of that declaration over the opposition of those who took the Ninteenth Century view that such prevention was impossible. Today it can be done in this country because of the tremendous productivity of a system of free enterprise.

In spite of such productivity, the operation of our free enterprise system leaves a certain number of people without work or working at jobs which do not produce enough to give them a decent living. Others, for one reason or another, are unable to work. I believe that in such cases the Federal government has a secondary responsibility to see that educational opportunity is assured to all and that some floor is placed under essential services like food, clothing, housing and medical care. A good many of the states are quite poor, far below the national average. In general, the ability of all states to raise taxes is limited by the fact that heavy state or local taxation drives the taxpayer into other states. The state systems of taxation were set up originally to take care of education, the administrative and judicial systems of state and and county, and essential city services like the police and fire. Health was a later development, and in many states and localities, health expenditures have always been skimped. It has seemed to me, therefore, that Federal aid was more necessary in the health field than almost any other to supplement state revenues, if we recognize at all a Federal interest to provide a reasonable standard for medical care for the indigent. I do feel very strongly, however, that Federal aid is only justified on any theory to aid the states take care of those who are unable to pay for this medical care themselves.

Hospital Construction Bill

Last year I helped work out the so-called hospital construction bill. It is based on the principl that the Federal government is interested in seeing that hospital service is available throughou the entire United States up to a certain standar of beds per thousand population. Federal aid made available up to one-third of the total e pense only if the state submits a comprehensiv plan for universial hospital service. In such pla must be included all the private hospitals, sin

(Continued on Page 1432)



Truly, this is America...The Doctor-Pharmacist Team

Friends as well as colleagues in healing, the doctor drops in to chat with the pharmacist.

IN EVERY American community the physician and the pharmacist are a team, combining their knowledge and skill to make this nation's health the finest in all the world.

The efforts of the physician rest on his certainty that the solutions he may inject . . . the salve he may apply . . . the liquid or tablet he may prescribe, have been accurately dispensed by his pharmacist.

So, between these two servants of the people, a strong bond exists—fashioned in mutual interest for the well-being of those they serve. How truly American is this warm relationship of free men—each a master of his own craft, both eager to exchange news and information of their work.

It is by such initiative medicine follows the precept of one noted physician, who said, "...We must preserve, first, the Soul of Medicine, and second, Freedom in Medicine."

IN SUMMIT, New Jersey, a truly American community, Ciba constantly seeks to develop and supply the doctor and his partner, the pharmacist, with new drugs and new uses for established drugs. Thus Ciba shares in the progress of the doctor and the pharmacist and in the progress of free American Medicine.

CIBA PHARMACEUTICAL PRODUCTS, INC.
SUMMIT NEW JERSEY

(Continued from Page 1430)

our hospital service is built up so largely on a private basis. Some question may be raised whether Federal money ought to be spent to enlarge private charitable facilities, but it seemed most unwise to propose a plan tending to freeze private hospital facilities where they are and throw all expansion into the public field.

The initiation and administration of the hospital plan, and the construction of the hospitals, is left entirely under the supervision of the states. They must indicate the relative priority of importance of different projects, and the Surgeon General can give aid only in accordance with the priority of need indicated by the state. We attempted to define clearly certain general standards, and we gave an appeal from the Surgeon General's decisions on approval of plans to a National Hospital Board. The bill was written to avoid, as far as possible, wide discretion in the Surgeon General or any other Federal officer or board, and prevent the distribution of funds on a whimsical or prejudiced or political basis.

While I believe strongly in Federal assistance to social welfare, it is vitally important that the bill be drafted in accordance with certain principles if we are going to retain freedom in the United States. In the first place it must provide for state and local administration. To insure this the standards should be stated in the bill and not left to the discretion of a Federal officer or board who, by abusing that discretion, can force the state and local authorities to follow his directions. The assistance provided must be provided only to those who need it and in a reasonable, minimum amount. In the long run the only way those can be helped who do not work is out of the earnings of those who do, and the burden on the workers through taxation must not be such as to discourage increased effort and production. Furthermore, the man who is helped by the state must not be quite as well off as the man who earns his own living and stands on his own feet.

Taft-Ball-Smith Proposal

This spring I introduced a bill for general medical assistance, following the principles of the hospital bill. I was joined by Senator Ball of Minnesota and Senator Smith of New Jersey. Our bill, which we intend to reintroduce next January, proposes Federal aid to states for general medical care at the rate of 200 million dollars a year. The distribution is to be contingent on the state setting up a plan and a system by which medical care may be available to every person in the state unable to pay for its cost. Furthermore, it provides aid to the states to enable them to set up a free inspection service for all school children so that such children may have annual medical and dental examinations. The state plan may provide either for the direct furnishing of medical care to those unable to pay by the state or local governments, or by private institutions paid by the state. Or the state plan may provide that the state employ voluntary health insurance funds to look after those unable to pay for such insurance. That is to say, the state with its own funds supplemented by Federal aid may pay the necessary fees for the medically indigent into a voluntary fund and have such fund perform the medical services. The fund might be a state fund or one established by the medical profession.

I understand that in Michigan, and now in many other states, the United States Veterans Administration has employed a voluntary health fund established by the medical profession to assume the care of veterans. Of course, it makes it much easier to establish a voluntary fund if a large part of the service to be rendered is paid for by the state. Then insurance facilities could be made available by such funds to the middle-income group able to pay their own annual charges, and requiring no direct assistance or charity from government.

Our bill also furnishes increased funds for aid to states and others for expanded public health work, and for more medical research.

This bill has been attacked by the Murray-Wagner-Dingell propagandists principally on the ground that it would require a means test pictured as a horrible indignity. It is quite true that it only proposes to furnish aid to perhaps 20 per cent of the population instead of 95 per cent as under the Wagner Act. That is one of the two essential differences, and a vital one. With due respect, the excitement about a means test is only a red herring. Every hospital today imposes a means test and asks those who can pay to pay. In our public housing program we check the income of every inmate before public housing can be available to him. In the District of Columbia and elsewhere dental service is furnished free only if the principal certifies that the child or his parent is unable to pay, and no one criticizes the plan. There are many other examples. In my opinion, the only justification for a free service at the expense of the taxpayer is the inability of the recipient to pay for it. The amount of his income in these days of income tax deduction and social security is usually a definite, ascertainable figure. In millions of cases today, the means test is administered in an unobjectionable way.

Of course, the difference between the government looking after the indigent and looking after the entire population is a fundamental issue. One principle has always been embodied in the law of every free Anglo-Saxon people; the other is socialism. Care by the state of the 20 per cent having the lowest income is no interference with the freedom of the other 80 per cent, a freedom so essential to preserve, because from this 80 per cent comes nearly all of the initiative and energy and progress required if this is to remain a great

(Continued on Page 1438)

IN THE BEST INTEREST

OF THE MENOPAUSAL PATIENT

It is in the best interest of the menopausal patient to administer PROGYNON-B (alpha-estradiol benzoate), for it provides a wide margin of clinical superiority. Medical testimony has proved that PROGYNON-B, by intramuscular injection, offers:

GREAT POTENCY	SUSTAINED EFFECTS
RAPID ACTION	COMPLETE SAFETY
SMOOTH ABSORPTION	TRUE ECONOMY

PROGYNON-B

(benzoate of pure crystalline follicular hormone)

DOSAGE: For average menopausal symptoms 0.33 mg. (2,000 R.U.) once or twice weekly. Severe symptoms, as after surgical or x-ray castration, may require 1.0 mg. to 1.66 mg. (6,000 to 10,000 R.U.) per injection.

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MSMS ANNUAL SESSION, 1947

The eighty-second annual session of the Michigan State Medical Society will be held at the Pantlind Hotel-Civic Auditorium, Grand Rapids, the week of September 21, 1947.

The scientific assemblies will begin Tuesday noon, September 23, and continue through Friday noon, September 26. This new arrangement will be more convenient for all members of the Michigan State Medical Society, especially those who are able to drive to the meeting in one, two, three or four hours' time—or those who plan to use the new morning Streamliner from Detroit.

The House of Delegates will convene Sunday, September 21, at 2:00 p.m., and again Monday at 10:00 a.m. and 8:00 p.m., to transact the business of the Society.

A stellar program is being arranged by the Committee on Scientific Work, which met November 17 to prepare for the scientific work of the 1947 Annual Session.

* * *

COUNTY SECRETARIES' CONFERENCE

The annual County Secretaries' Conference will be held at the Book-Cadillac Hotel, Detroit on Sunday, February 2, 10:00 a.m. to 4:30 p.m. An interesting and informative program is being arranged. All members of the Michigan State Medical Society are cordially invited to attend.

P.R. Conference

The annual conference of chairmen of Public Relations Committees of component county societies also is scheduled for Sunday, February 2, at the Book-Cadillac Hotel, Detroit, 10:00 a.m., to 4:30 p.m.

* * *

AMERICAN LEGION OPPOSES COMPULSORY HEALTH INSURANCE

The following resolution was unanimously approved and passed at the twenty-eighth national American Legion Convention, in San Francisco, October 4, 1946:

WHEREAS: Veterans who have served in the armed forces now have available to them hospital and medical care provided by the United States Government; and

WHEREAS: There are countless voluntary health insurance plans now being offered by the physicians and the insurance companies; and

WHEREAS: Proposed plans of compulsory health insurance would increase the tax burden and bring about regimentation of the medical profession; and

WHEREAS: All forms of compulsion are repugnant to our American way of life since our liberties and opportunities would be circumscribed;

NOW, THEREFORE, BE IT RESOLVED: That the National Assembly of the American Legion hereby expresses its opposition to compulsory health insurance.

LICENSING OF HOSPITAL RESIDENTS

The Michigan State Board of Registration in Medicine recently revised its Administrative Regulations and Rules, so that Paragraph 1 now reads:

"Applicants for Michigan medical licensure by examination must fulfill the following requirements in addition to those prescribed by Law:

"(f) One year of rotating internship training in a United States hospital approved for internship training by the Michigan State Board of Registration in Medicine; provided that said period of twelve months' internship training may be extended to twenty-four months upon the written request of the intern, said written request to be indorsed by the hospital superintendent or chief of staff. It is further provided that during the second twelve months of the two-year period, those planning to continue beyond the second year in a Michigan hospital or those planning to practice medicine in this State must secure certification from the Michigan State Board of Examiners in the Basic Sciences and Michigan medical licensure before the completion of the twenty-four month period of internship training. For the duration of World War II the twelve months' internship requirement for such rotating internship training shall be temporarily reduced to nine months."

* * *

INTERNATIONAL OPHTHALMOLOGY FELLOWSHIP

The Eye-Bank for Sight Restoration, Inc., 210 East 64th Street, New York, has announced the first international fellowship to be granted to an ophthalmologist of the Hebrew University in Palestine for postgraduate training in ophthalmology and research work in problems related to the cornea, under the direction and supervision of the Wilmer Institute at Johns Hopkins University, Baltimore, Maryland.

* * *

REHABILITATION CENTER FOR ARMY HARD OF HEARING CASES OPENED AT WALTER REED HOSPITAL

The army's new and ultra-modern rehabilitation center for the deafened and hard of hearing has received eighty-five patients at the Forest Glen Section since it opened.

Designed as a special unit where the hearing-handicapped can have their disability appraised and corrected to the maximum extent through hearing aids, lip reading and speech correction, the Aural Rehabilitation Center will have sufficient space, equipment and staff to care for as many as 250 "students."

The GI enrollees—officers and enlisted personnel, women as well as men—will, indeed, be students rather than patients. For persons ordered to the special Forest Glen facility, which is a section of Walter Reed General Hospital, will be those who are finished with treatment and surgery, who now require rehabilitative attention.

Soundproof testing rooms, where doctors and technical experts will be able to tell precisely what the subject's

(Continued on Page 1438)



▪ ▪ ▪ during Convalescence . . . in Dysmenorrhea . . . following Childbirth . . . at the onset of the Menopause . . . following Bereavement or Misfortune . . . in Old Age . . .

. . . *Dexedrine* may be relied upon to increase the patient's accessibility to treatment; to effect a remarkable improvement in mood and outlook; and to aid in restoring a normal grip on life and living.

Dexedrine Sulfate tablets

(dextro-amphetamine sulfate)

Smith, Kline & French Laboratories, *Philadelphia*

REHABILITATION CENTER

(Continued from Page 1436)

hearing loss is, are on the bottom floor. The two upper floors will house offices of the administrative staff, record keeper and Red Cross unit.

Lip or speech reading will be taught both in individual lessons and in class. A knowledge of its principles and fundamentals confers an added advantage upon the hard of hearing person, even if he is a successful user of a hearing aid.

Speech correction exercises will be given those whose enunciation or pronunciation has suffered as a result of hearing loss. Careful examinations and study will precede issuance of a hearing aid. Several types are tested on the patient and the one that gives the best results, and which satisfies the learner most, is the one ultimately selected.

* * *

MEDICAL ADVISORY COMMITTEE DISCUSSES POSTWAR PROBLEMS AT FIRST MEETING

The Medical Advisory Committee to the Secretary of War, recently appointed by the Honorable Robert P. Patterson, held its first meeting in the Pentagon on September 18. Problems in postwar army medicine were discussed.

Attending the conference were Major General Norman T. Kirk, the Surgeon General; Brigadier General Raymond W. Bliss, Deputy Surgeon General; Brigadier General Guy B. Denit, chief of the Office of Plans and Operations; and the following consultants: Dr. Edward P. Churchill, Dr. William S. Middleton, Dr. Michael E. DeBakey, Dr. Hugh J. Morgan, Dr. Elliott C. Cutler, Dr. Maurice C. Pincoffs, Dr. William C. Menninger and Dr. Eli Ginzberg, Ph.D.

* * *

MICHIGAN POSTGRADUATE CLINICAL CONFERENCE

The first annual Michigan Postgraduate Clinical Conference, sponsored by the Michigan State Medical Society in co-operation with the Wayne County Medical Society, the University of Michigan Medical School, the University of Michigan Department of Postgraduate Medicine, Wayne University College of Medicine, and the Michigan Foundation for Medical and Health Education, will be held at the Book-Cadillac Hotel, Detroit, from Tuesday noon to Friday noon, March 11-14, 1947.

A top quality scientific program, presented by Michigan's best clinicians and teachers, will feature the Conference, which is to be held annually in Detroit.

Grover C. Penberthy, M.D., Detroit, is Chairman and L. Fernald Foster, M.D., Bay City, is Secretary of the Committee on Arrangements.

Members of the Michigan State Medical Society are invited and urged to make plans now to attend the March Postgraduate Clinical Conference. A Housing Committee has been appointed with headquarters at 1005 Stroh Building, Detroit 26, Michigan.

The Program of the Michigan Postgraduate Clinical Conference will be mailed to all MSMS members the latter part of February.

Attend Michigan's Postgraduate Clinical Conference, Detroit, March 11-14, 1947.

THE GOVERNMENT IN MEDICINE

(Continued from Page 1432)

people. It is no interference with the freedom of the medical profession. In fact, I suspect that most doctors would be glad to be relieved of many of their charity patients. The real opposition to our bill is that it does not socialize medicine, and it does not take away the health function from states and local governments.

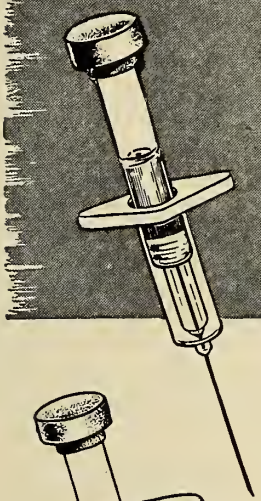
In the bill, safeguards are provided to prevent interference with state and local independence from those who administer the new assistance. Undoubtedly, any Federal aid presents some danger of Federal domination. Most New Deal measures are so drafted that Federal officers have a very wide discretion. By using it arbitrarily, some bureaus, particularly those with the New Deal crusading spirit, like the USES and the Children's Bureau, have directed states and local officials how their offices must run in detail. But bills need not be drafted in that way, and I believe that federal aid can be furnished without Federal control if someone does the drafting who desires to preserve state and local independence instead of desiring to destroy it. We have tried in every way to advance the security of the people without pursuing a course which in the end must end their liberty.

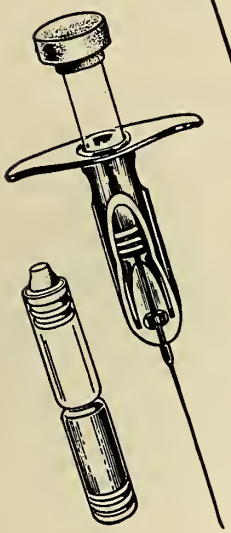
Conclusion

The question which I have been discussing is partly a medical question, but above all, it is a governmental question. I hope the doctors will take an active and continuous interest. If the doctors take the position that everything is rosy in the best of all possible worlds, and nothing need be done, they are likely to be swamped politically by the demand for increased medical service. I have felt that the attitude of some of the medical associations has been almost completely negative. It is up to the doctors to recognize that there is a problem and to take an active part in working out the solution to that problem. The bill which we have presented is not perfect. Every word should be examined and considered. But if the doctors do take an active part, they will have the enthusiastic co-operation of that large majority of Congress who fear more than anything else in the world the increased concentration of power in the hands of Federal bureaus. It is up to us to show that a government based on liberty of the individual, of the professions, and of local communities, can assure better social service to its people than the most efficient of socialistic states.

So Simple

No
- sterilization before it's used
- waiting for it to cool
- rust or water particles to worry about
- doubt about the accuracy of the dosage
- cleansing after its use





. . . and when the injection is completed, you just throw it away. That's the simplicity of the B-D* Disposable Cartridge Syringe with Bristol Penicillin in Oil and Wax (Romansky Formula) in the unique cartridge with the aspirating stopper. *(Upper Illustration)*

One injection of this penicillin formula and you accomplish the work of eight of the aqueous solution.

Many physicians who appreciate the advantages of the cartridges prefer a permanent, sterilizable instrument. The B-D* Metal Cartridge Syringe (left) fills this need. Both types are available through your dealer.

*T.M. Reg. Becton, Dickinson & Co., Pat. No. 2,153,594.

Disposible Syringe and Cartridge (300,000 units Bristol Penicillin). Cartridges in boxes of one and five. Metal Syringe in boxes of one each, with two needles.

BRISTOL PENICILLIN in OIL and WAX

(ROMANSKY FORMULA)

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Editorial Comment

NATIONAL HEALTH PROGRAM

. . . The doctors are interested in better health for the citizen-taxpayers based on scientific fact and proved procedure and the voluntary participation of the beneficiaries. They have no interest in selling the citizen-taxpayers a gold brick; the doctors are not running for any office and few seek government jobs; doctors are concerned with the progress of medicine and the benefits this will automatically bring to the citizen-taxpayers and are not concerned about who wins the next election or about the propagation of any ideologies, socio-economic theories, or other by-products. Medicine and better health is their business.

Government, on the other hand, is concerned with the medical welfare of the citizen-taxpayers, and with better health only as a relatively small side line of its huge legislative, judicial, and executive business. It is important to remember that the business of government is—government. It is not supposed to be in business in competition with private enterprise or in the competitive practice of any profession but that of government.

If now, the current administration proposes a compulsory system of sickness insurance (S.1061) to be operated and controlled federally as a side line to its regular business of government, it would seem to depart somewhat from the concept of a republican form of government and to be, in fact, not so much interested in the promotion of the health of the citizen-taxpayers as in the promotion of a non-republican ideology by whatever label you wish to call it.—Editorial, *New York State Journal of Medicine,* September 1, 1946.

HOSPITAL PLAN SERVES 1,250,000

Blue Cross Called Socialization Answer

By Jack Pickering

"If we could get the Michigan plan adopted all over the country, I think the campaign for socialized medicine would die," Dr. William A. Hyland, incoming president of the Michigan State Medical Society, said today as the society closed its convention at Hotel Book-Cadillac.

The Michigan plan consists of the Michigan Medical Service and Michigan Hospital Service (or Blue Cross), which are voluntary insurance plans to meet unexpected medical expenses.

"The public, I suppose, doesn't realize that this plan was created under the sponsorship of the medical profession itself, that is, our society," Dr. Hyland said.

Doctor's Own Plan

"Maybe it's our own fault for not having paid more attention to our public relations in the past. However, the Michigan Plan is the profession's answer to propaganda for socialized medicine."

The Michigan insurance plan, Dr. Hyland said, is non-profit and co-operative, and the largest voluntary group of its kind in the world, with nearly 900,000 covered with medical insurance policies, and 1,250,000 in the hospital plan. Cost runs around $5 a month.

"It is spreading like wildfire now," he said, "with other states taking what they consider the best parts of our plan.

"Under our plan you get the doctor you want. Under socialized medicine, you get the doctor they tell you to go to. It would be on the order of army medicine—you don't pick your doctor.

Fears Red Tape

"Under socialized medicine, if you wanted a specialist, you would have to be referred, or would have to go to a government office and fill out an application form and get it approved.

"We believe that there is bound to be dissatisfaction and red tape in everything run by a government bureau, and this would be the same. We don't want the medical profession to be that way—look at the confusion in OPA over meat.

"Furthermore, the Murray-Wagner-Dingell Bill (for socialized medicine) wasn't even prepared by a doctor. It wasn't written by Senators Murray or Wagner, or Rep. Dingell, either. Hearings brought out that it was written by a lawyer, Isadore Falk, of the Social Security Board.

Government Can Aid

"Our belief is that curative medicine should remain in the hands of medical men. We have no objection to preventive medicine by government to a certain extent. Maybe I shouldn't speak for the whole group, but that's my feeling.

"We have vaccination, toxin-anti-toxin and so on in the schools, and there is much that can be done to keep people from becoming sick. And sanitation—we are not arguing about that, either."

The Michigan plan covers all major medical needs but "not minor things, like going to the doctor to get your throat swabbed." For low-income members, it pays the complete fee; for middle and high incomes, the patient pays the difference between the minimum fee and the full fee charged by the physician.

Discussion Did Good

Dr. Hyland, a Grand Rapids physician, added that the whole argument over socialization had done good, even though he opposed the principle of socializing.

"All discussion is good," he commented. "Until then, I'm afraid we had concentrated too much on scientific medicine, the actual curing, and forgot some of the economic aspects, the financial problems of our patients. Now I think we have found the answer to that."—*Detroit Times,* September 28, 1946.

(Continued on Page 1446)

"Footprints on the sands of time"—No. 1

of a series honoring the contributions of eminent personalities of medicine and pharmacy.

JOHN MORGAN - 1735 - 1789

Physician and Pharmacist

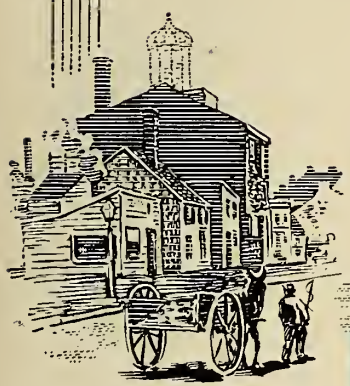
Founder of the first medical school affiliated with any college or university in this country — the Medical School of the College of Philadelphia, now the Medical Department of the University of Pennsylvania.

In the first commencement address at the College he stated:

"We must regret that the very different employment of physician, surgeon and apothecary should be promiscuously followed by any one man. They certainly require very different talents.

*"The business of pharmacy is essentially different from either, free from the cares of both, the apothecary is to prepare and compound medicines as the physician shall direct . . ."**

His pioneering efforts in establishing the separation of functions of the physician and the pharmacist advanced their roles as guardians of the public health — the physician as diagnostician and prescriber, and the pharmacist as compounder and dispenser.



*LaWall, C. H.: Four Thousand Years of Pharmacy. An Outline History of Pharmacy and the Allied Sciences. Philadelphia, J. B. Lippincott Company, 1927; p. 403.

As manufacturing pharmacists, The Harrower Laboratory, Inc. recognizes its obligation to continue serving the interests of public health in cooperation with the physician and the dispensing pharmacist.

The Harrower Laboratory Inc.

GLENDALE 5, CALIFORNIA

Convention Echoes

All registration records were broken at the 1946 MSMS annual session, held at the Book-Cadillac Hotel, Detroit, the week of September 22, 1946.

A total of 2,866 persons were registered, including 2,164 doctors of medicine, 309 guests, and 393 exhibitors. Among the 2,164 doctors of medicine, 1,871 were members of the Michigan State Medical Society, representing 40.2 per cent of the MSMS membership (including all military members).

* * *

The proceedings of the eighty-first annual meeting of the MSMS House of Delegates, held September 22, 23 and 24, will be published in the December, 1946, and January, 1947, issues of JMSMS. A reprint of the proceedings will be made and furnished to all delegates, and to any and all members of the Michigan State Medical Society, upon request.

* * *

WHAT THEY THOUGHT OF THE MSMS ANNUAL SESSION

Emil Novak, M.D., Baltimore, guest essayist: "I enjoyed my short visit immensely. The meeting impressed me as a wonderfully successful one, for which I think the officers of the Society deserve hearty congratulations."

C. W. Mayo, M.D., Rochester, Minnesota, guest essayist: "I appreciate your asking me to appear on the program of the Michigan State Medical Society meeting. I enjoyed the meeting and you certainly are to be complicated on an excellent program as well as excellent exhibits."

Charles R. Rein, M.D., New York City, guest essayist: "I thoroughly enjoyed attending the 1947 Annual Session and hope I will be invited to participate at some future meetings of your medical society. Thank you for your many courtesies."

George Crile, Jr., M. D., Cleveland, Ohio, guest essayist: "I was deeply impressed with the efficiency with which this meeting was run, and the courtesies which were shown me throughout my stay."

Roscoe R. Graham, M.D., Toronto, Canada, guest essayist: "I am sure you must have great satisfaction in having organized and carried through such a successful meeting."

F. E. Senear, M. D., Chicago, guest essayist: "I enjoyed the meeting of the Michigan State Medical Society very much and, as on previous occasions, have found it one which is run in a most efficient manner."

Hattie E. Alexander, M.D., New York City, guest essayist: "I should like to take this opportunity to thank the Michigan State Medical Society for its hospitality. I enjoyed my visit to Detroit indeed."

S. Allen Wilkinson, M.D., Boston, guest essayist: "It was a pleasure to meet you at your very successful State Medical Society meeting. I enjoyed giving the talk and the enthusiastic reception of the audience. I want to thank you and the Society for all the many things which you did to make the trip a pleasant one."

Bayard Carter, M.D., of Durham, North Carolina, guest essayist: "I thank you for a thoroughly enjoyable visit to Detroit and for letting me take part in a truly stimulating meeting with a grand crowd of men. In addition, my wife had a fine time and was sent flowers and fruits. All good wishes and thanks again."

St. Clair County and City Health Department: *C. C. Benjamin, M.D.,* and *A. L. Callery, M.D.*: "This is to extend congratulations to the members of the Michigan State Medical Society on the fine program of the eighty-first annual session held in Detroit, September 25-26-27, 1946."

James Milton Robb, M.D., Detroit: "I want to compliment you on the way the whole program developed. The men were excellent and everything clicked."

Alexander M. Campbell, M.D., Grand Rapids: "I want to follow my yearly habit of complimenting you on the success of the 1946 Annual Session in Detroit. It was a very fine program arranged with the usual efficiency."

Ray E. Smith, executive secretary, Indiana State Medical Association, Indianapolis: "I thoroughly enjoyed the days I spent in Detroit attending the annual session of the Michigan State Medical Society. I appreciated the opportunity you gave me to attend the Secretaries' Conference. I picked up a number of good ideas which I intend to use at the annual session in October."

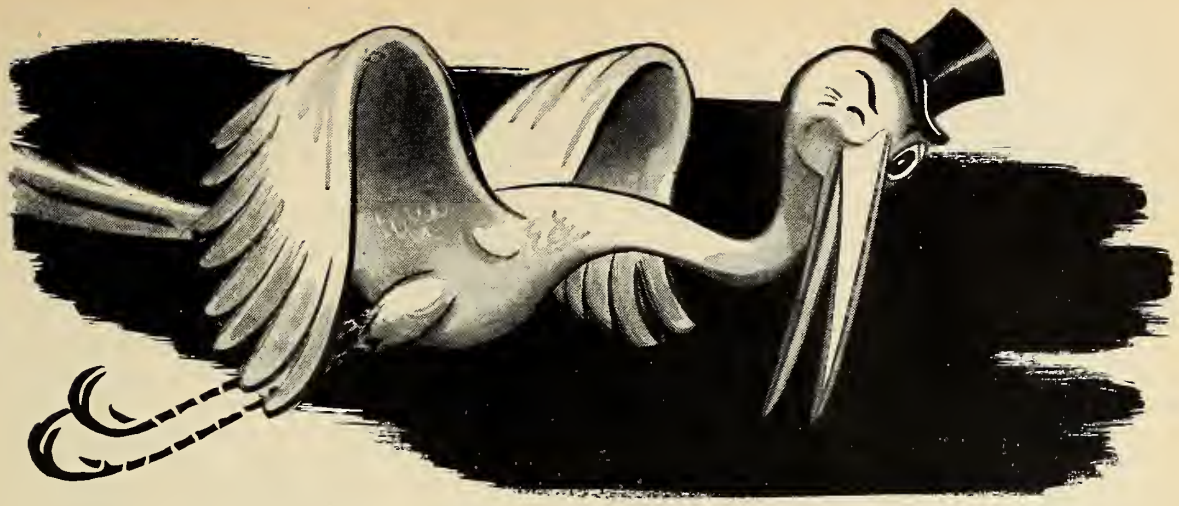
John C. Foster, executive secretary, South Dakota State Medical Association, Sioux Falls: "Thank you for the help and information I received while attending the MSMS annual session in Detroit. I learned a lot and know that the contacts I made will pay dividends at our next annual meeting. I realize, of course, that it is highly improbable that any other state will ever put on the kind of show that you do. However, on a smaller scale, we hope to do nearly as well next June in South Dakota—thanks to you and the opportunity you gave me to visit your show."

L. E. Bauer, M.D., Detroit: "I thought the recent convention a great success and heard many doctors here in Detroit say it was the best conducted of any of the larger meetings, which I think is a considerable compliment to you, and well deserved."

Burroughs Wellcome & Co., New York, an exhibitor (by H. F. Alexander): "We have received enthusiastic reports of the value of the MSMS meeting from every one of our representatives who attended. We most certainly intend to be with you again next year. If all convention managers would run their meetings like yours, the lives of us exhibitors would be almost too happy to bear."

J. B. Lippincott Company, Philadelphia, an exhibitor (by J. W. Colen): "Just a line to let you know my appreciation for the kind courtesies extended the writer by yourself and your staff. I think you did a marvelous

(Continued on Page 1446)



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TYPICAL ANALYSIS

			Per Ounce
Protein	15.3%	Calcium	216 mg.
Fat	6.8%	Phosphorus	278 mg.
Carbohydrate	65.1%	Iron	6.6 mg.
Fiber	1.9%	Thiamine	0.3 mg.
Minerals (ash)	4.7%	Riboflavin	0.051 mg.
	Per Ounce	Niacin	0.41 mg.
Calories	108		

BABY QUAKER INSTANT STRAINED OATMEAL

(Continued from Page 1444)

job this year in organizing the meeting as far as the exhibitors were concerned. We are very happy about it and extend our best wishes for your continued success at future meetings."

Professional Management, Battle Creek, an exhibitor (by Henry C. Black): "Mr. Skaggs and I both appreciate the very fine way you handle these conventions, and now that the smoke has cleared away, maybe you will be glad to hear it again."

Ethicon Suture Laboratories, New Brunswick, N. J., an exhibitor (by I. R. McCall): "While writing my report on the MSMS convention held in Detroit, I am quite aware that the success of the meeting was due to much planning and hard work before the show opened. The smooth timing and individual service on the part of the MSMS staff was commented on by several exhibitors in our immediate location. Please be assured the Ethicon Suture Laboratories are grateful, and, needless to say, we look forward to future meetings of the Michigan State Medical Society."

* * *

An interesting feature of the eighty-first annual session of the Michigan State Medical Society was the exhibition of paintings and drawings, depicting medical history and progress, by three distinguished artists, Rockwell Kent, James Chapin, and Dean Cornwell. This exhibit was held in the Fine Arts Galleries of the J. L. Hudson Company, during the period of the MSMS annual session. The exhibition was made possible through the combined co-operation of the Michigan State Medical Society, the J. L. Hudson Company, Wyeth, Inc., Ciba Pharmaceutical Products, and Schering Corporation. Paintings and drawings worth practically $100,000 were on display for a thirty-day period, beginning September 25. The exhibit was well attended by medical men and their ladies, as well as by the public in general.

EDITORIAL COMMENT

(Continued from Page 1442)

"HIS ACTS BEING SEVEN AGES"

Dr. Marjory W. Warren, in a recent issue of the *Lancet*, has presented the case of the chronic aged sick, in whom, so often, "dull, apathetic, helpless and hopeless, life lingers on sometimes for years, while those round them whisper arguments in favour of euthanasia." This is not the picture that would be presented, nor will it be, when we fully awaken to our responsibilities, which are new in their present magnitude. The aged infirm we have always had with us, but due largely to the triumphs of medicine, the span of life has steadily lengthened, and because of the war and the entrance of women into industry, there is a shortage of young persons available to care for the aging population.

The better care of the chronic sick, and particularly the aged sick, is a medical responsibility that will in no way decrease with time, for the expectation of life is constantly improving. Thus, in Great Britain the population of persons aged sixty or over has increased from less than 2,500,000 in 1901 to over 6,250,000 in 1944, and in the United States it is estimated that the 9,000,000 population of those sixty-five years of age or over in 1940 will increase to 22,000,000 in 1980. Since we have succeeded in prolonging human life, we must bend our energies to making that prolongation endurable. There is little doubt that the infirmities of age have been neglected and that too little effort has been made to diagnose and treat the illness of old people and to plan for what degree of rehabilitation may be found possible and practicable.

The aged, in their hospitalization, need wards that are designed to meet their physical circumstances, that simulate their accustomed surroundings and that are near their homes. They need diets suited to their age, and equipment adapted to their infirmities. They need floors that are not highly polished, handrails about their wards and elevators or suitably graded stairways. The geriatric hospital ward should be used as a clearinghouse to the patient's or to an otherwise suitably conducted home, with a close and continuing follow-up. Never should the patient, regardless of age, who can be salvaged for whatever time is remaining, be allowed to become bedridden.

Geriatrics should be as useful a specialty for the latter end of life as pediatrics is for the beginning years. In the words of the editorial accompanying Dr. Warren's paper, "Given domestic help, nursing care and medical attention when needed, many old people who now die after years in hospital could live interesting and possibly useful lives at home, finally dying triumphantly in their own beds."—Editorial, *Massachusetts Medical Society*, September 5, 1946.

SOLD DOWN THE RIVER

The suggestion has frequently been made that amendments should be proposed to the sickness insurance title of the latest Wagner-Murray-Dingell bill and that the bill might thus be made acceptable to freedom-loving Americans. This is like asking a builder to remodel a federal penitentiary into a California bungalow. One cannot have freedom within the framework of compulsory sickness insurance. It is political and bureaucratic doubletalk to speak of freedom and compulsion as conditions which may be enjoyed simultaneously. Perhaps the people of America wish to seek health under a scheme of nationalized medicine. But I doubt if that is the case. To the extent that they are "sold" on the idea, they have been "sold" by glittering promises that cannot be fulfilled. And, I might add, they have been sold down the river.—Margaret Shearon in *The Monitor*.

—Editorial, *West Virginia Medical Journal*, September, 1946.

Little Joe Genius Says—

I see that Mr. Green of the A. F. of L. would investigate the finances of the A.M.A., and the N.P.C., but does not like the Case Bill that would look into the finances of the A. F. of L.

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President's Address

By R. S. Morrish, M.D.
Flint, Michigan

General Assembly



Following the wake of war, men generally have been worried over the state of the world. Ralph Waldo Emerson was obviously worried when he spoke these words, "This time, like all other times, is a very good one, if we but know what to do with it." He was not speaking of war at that time, but had in mind the state of turmoil this country was in about the year 1837 when national administrative policy had all but wrecked American society and the foundations of national credit. In the heat of emotion he said the best time to be born is during a revolution—life is just one revolution after another, a series of crises in which the past is swallowed up and wise men gird themselves to meet the future.

The American people are again worried about national and international happenings and slowly, but surely, they are beginning to realize that America's future is the American people's business. No one but the unwise should be deluded by what they see and hear today. Reams of propaganda flow over the country, whose purpose is to confuse us and to destroy our unity. Bold attempts to legislate foreign ideas come out in the open, yet while these plans are pondered over and usually discarded by well-thinking men, there appear a dozen sinister methods which, cloaked in secrecy, plan to shackle democracy by indirection.

The favorite method seems to have always started with the control of medicine and the management of people's welfare, which in turn rapidly led up to complete and total direction of their everyday affairs and life. The Romans did it, Bismarck did it, Hitler's Germany did it, and what happened? Total collapse every time; accompanied by untold misery and unhappiness for millions of innocent souls. Carelessness or indifference on our part could allow a similar condition to happen here. The seeds are planted, and have taken root in this land founded and dedicated by our forebears to freedom and rugged individualism. It is due to the latter that we are great, and this holds true particularly in medicine. Under the American system a large part of our progress and knowledge has come from sources little known previously, but from minds that were unhampered by regulation and cramping limitations. The individual worker was able to use his God-given senses and evolve methods and discoveries of untold value to mankind. This has been America at its best, and it has always been a good place to live.

Formerly the doctor found it only necessary to practice good medicine. The public knew that he individually and his fellow practitioners collectively always had the welfare of the people at heart. And so they do today. Yet in the past few years we have had thrust upon us certain responsibilities of medical econmics and of medical distribution. While basically, the medical profession is not responsible for the economic ills of this country, we

Read at the General Assembly of the eighty-first annual session of the Michigan State Medical Society, Wednesday evening, September 25, 1946, Detroit.

are willing to do our part in providing a means to avert a family financial crisis in time of sudden or prolonged illness. This is done by providing a system of prepaid medical service, and likewise the hospital group has a plan to cover hospital costs. Michigan is recognized as a leader in the formation of these plans, and now has the widest percentage of coverage in the country. They have succeeded and are succeeding in such a way that nearly all the states in the union now have such plans. No compulsion is needed to make the public take advantage of these plans. Compulsion is not the American method anyway. What the public does need is more information concerning what we are doing and the advantages of the system. Michigan again has come to the fore. During the last year this Society has organized an outstanding Public Relations System with a full-time director. It is our intention that the people of this state shall be made to see that the medical profession has the public welfare at heart always. That it is united in its opposition to philosophies and plans which threaten to lower high standards of practice which it has voluntarily established for itself, and that the control of the medical profession should be limited to the statutes which affect the qualifications of doctors of medicine, and to those which provide for ethical conduct.

We have worked out a contract with the Veterans Administration which provides for home town care of disabled veterans, which carefully provides for retention of private physician-patient relationship. This is an excellent example of decentralized government medicine in which the agency recognizes the problems and rights of the medical profession. This should dispel the accusations that the medical profession is against everything the government proposes. We do insist upon a bargaining right and a willingness of the other party to appreciate our ideals and needs and to bear in mind always the needs of the beneficiary. We'll have none of the so-called planned economy with all its compulsion. The public will have none of it either when they get to know its implications, and that is the job for our public relations department. The people must know more about this, and we'll see that they get what they are hungering for. Not only knowledge, but service as well.

We have a God-given mission in this world, to heal the sick. And it's our duty to protect these people from well-organized attempts to force upon them compulsory plans which are unsound and un-American.

Again quoting Emerson, "This time, like all other times, is a very good one, if we but know what to do with it." Like him, I believe this is a good time to live. Your Society is doing its very best to know what to do with the problem of medical distribution and medical service that will do the greatest good to the greatest number of people. With the help of the people affected, there is no question but that we shall accomplish our purpose.

House of Delegates

EVERYONE here this evening will appreciate the changed conditions which again permit us to hold a regular convention of our State Medical Society, and to know that a large part of our membership is home again after an absence of several years in worldwide conflict. Those of us who were left behind to care for civilian needs, have carried on to the best of our ability, though in doing so there has been a startling number of casualties. Likewise, those who entered the service of our country have made many sacrifices, and some unfortunately have made the extreme one. Better for all of us that we can be re-united once again, and together carry the torch of organized medicine to new hights of perfection. During the past year it has been my lot to serve as your president, and to assume the duties of that honored position, the incumbent can but humbly appreciate the trust you have placed in him and hope that in some small manner he can justify your decision.

I shall release this office in a few days, and will be succeeded by Dr. William A. Hyland, and let me congratulate you on your good judgment in choosing him for your president in 1946-47. His service to you in past years speaks for itself, and I am convinced he will render good leadership in the coming year, which will be an important one from a legislative standpoint. I wish to take this opportunity to compliment your speaker, Dr. Ledwidge. He has proved himself a capable speaker, and has been very helpful to me during my term of office, and I can truthfully say as much for all of the other officers of our Society.

Read at the regular meeting of the House of Delegates, Michigan State Medical Society, Detroit, September 24, 1946.

The past year has been marked with considerable activity by your Society, and our committees on the whole have done excellent work. I cannot name them all here, nor enumerate all they did. You can get a good idea of their accomplishments by reading their written reports, but I do want to call your attention to two or three of these reports.

1. Ethics Committee: This committee reports that no meetings were held within the year. At first thought, we wonder why. But the reason for this inactivity is the fact there were no serious controversies in any of our counties which required attention on a state level. I consider this a healthy state of affairs.

2. Legislative Committee: Inasmuch as the state legislature was not in session during the year, this committee was not very active, but in the coming year there will be much for it to do and you may be sure from past performance, this committee will give good account of itself. I want to point out the importance of this committee, for the Council has given the responsibility of leadership in public relations to this committee, and to the Public Relations Committee. It is charged with the responsibility of investigating any proposed state or federal legislation which might affect the health of the public.

3. Public Relations: I think the most outstanding progress this Society has made is in the field of public relations. We have secured the services of a Public Relations Counsel whose duty is to consult with officers and committees, and to carry out their instructions in order that the Public Relations Plan can be actively and effectively implemented. There has recently been mailed to you a booklet setting forth the future plans of the Michigan State Medical Society, and I commend its contents for your careful consideration in order for you to formulate your own opinion on the projects tentatively planned for 1947. Michigan has been outstanding in acquainting the public with its activities in promoting good health, and to offer service protection against the sting of catastrophic illness, and it is most heartening to see similar activities now shaping up on a national scale.

To demonstrate that our Society has the ability and the will to make whatever study of public need that may arise, is well demonstrated by the activities of our Child Welfare Committee. It co-operated with the American Academy of Pediatrics in its nationwide study of child health care and services, and did this work on a voluntary basis without aid of government funds.

When governmental agencies come forth with worthwhile and workable plans for the public good, the medical profession is willing, and has the means and proper organization to render a service to government wards, provided the private physician-patient relationship is preserved. Our contract with the Veterans Administration is an excellent example of decentralized government medicine, providing home town medical care to veterans, in which the agency recognizes the problems and rights of the medical profession. It pays according to a fee schedule adopted by ourselves, and has accepted our classification of practitioners which seems to be the fairest and most equitable seen anywhere.

Michigan is a proved leader in the field of socio-economics. Our various surveys have shown what the public needs are in medical care, and have solved to a large extent the answer to that need. We have the answer when ill-advised plans are brought forth which would wipe out with the stroke of a pen all that experience we have painfully gained at high cost. Excellent care is offered the public at a minimum of operational cost. We must really have something if outside interests want to get in on our health activities. No doubt they see a chance to set up a large controlling machine, a taxing machine if you please, and away goes all that fine spirit of confidence that has existed between doctor and patient through the centuries. Does anyone think this taxing group will be an economical body? I think not. The people of this country must be prepared for the danger that lies ahead, and that is the job for our public relations department. To spread the truth! To tell them what our service plans have to offer. And here is where unity of purpose comes in. We have two agencies giving health service. One giving health service proper, and the other hospital service only. One cannot well live without the other. True, at times one may be up and the other down, and vice versa according to conditions and circumstances. They can and will survive all storms if they stick together. They must be democratic in operation, truly representative of their component parts, and personalities must give way to public need. None of those things are impossible if level heads get together and

reason out a cure. And when they come out with a united purpose, there will be no pointing of a scornful finger by our legislative-minded and tax-minded adversaries who would want to say, "I told you it wouldn't work, we need government medicine." Give them a united front and they won't like it. We have nothing to fear if we keep ourselves right. We must make known our purpose, and these same people will grapevine the word along to our legislators something like this: "We want good medicine, honest medicine. We want our doctor of choice; just leave him alone."

Now, gentlemen, you are here to deliberate on quite a number of issues, and resolutions. My term of office will be over in another two days, and it seems presumptuous for me to stand here, and tell you what we have done, or what we hope you will do during this session.

In San Francisco, Mr. Upton Close told a meeting of state officers that we are in big businenss, six billion dollars worth, and apparently don't know it. He advised that we play the part: let the people know we are Big Business, let Congress know we are Big Business, and then, and only then would we command the respect that is our due, and likewise would be looked upon as the authoritative body in matters medical.

In electing you as our delegates, we, the doctors of Michigan, feel that the affairs of our Society are in good hands. Certainly the events of the past year have alerted us to our responsibilities as protectors of the public's health, and to our need for good citizenship. In leaving you, I wish to express the great pleasure it has given me to be associated with you for six years as councilor, and the past year as your president. I wish you all Godspeed in your endeavors.

MSMS

A SOLID PROFESSION

The Secretary (Dr. Charles Hill) announced the returns of voting on the Insurance Acts Committee's recommendation to insurance practitioners *to place their resignations in the hands* of the committee unless the Minister was willing fully to apply the Spens Report to the current capitation fee. *He said that up to the previous day* reports had been received from 146 panel committees. In sixty-three areas the voting was unanimously in favour of the I.A.C. Recommendation; in twenty-nine areas there was one dissentient; in fourteen areas two dissentients; and in forty areas more than two, though in most of these areas the number of dissentients did not exceed five. Over 95 per cent had expressed their willingness to resign if called upon.—*British Medical Journal,* November 2, 1946.

Surgical Procedures for Carcinoma of the Rectum and Rectosigmoid

By Charles W. Mayo, M.D.
Rochester, Minnesota



As the average age of mankind increases, those disease processes to which has been allotted the task of maintaining human life balances, will assert their rights more vehemently. Malignant disease in some form is one of the most potent forces that man must combat in order to lengthen a productive life and delay death. It is second only to heart disease.

The problem of what a physician or surgeon can do when dealing with malignant disease is not wholly dependent on him; it also depends on the individual patient involved, from the standpoint of how quickly he has recognized the changes of health and how promptly he has sought adequate treatment. However, once a patient has placed himself or herself in a physician's hands for advice, direction or treatment, the problem becomes the physician's, and he succeeds or fails in his mission in life depending on the thoroughness of his examination and on the wisdom of his advice and treatment.

Since this discussion is concerned with carcinoma of the rectum and rectosigmoid, it would seem important to know how frequently this pathologic condition occurs in this situation, as related to the entire colon and to the entire gastro-intestinal tract. Approximately 64 per cent of carcinomas of the colon and rectum are situated in the rectosigmoid, rectum and anus, within the reach of the finger. If one includes both growths palpable by the finger and those which can be visualized by sigmoidoscopic examination, about 75 per cent of the growths of the colon and rectum fall in this class. In other words, a majority of the malignant lesions of the colon and rectum can be diagnosed by careful ex-

Read before the eighty-first annual session of the Michigan State Medical Society, Detroit, Michigan, September 25 to 27, 1946.
Dr. Mayo is of the Division of Surgery, Mayo Clinic, Rochester, Minnesota.

amination with the finger and with the sigmoidoscope. It follows that there is little excuse for the physician who treats hemorrhoids when a malignant lesion is present in these regions. If one considers the entire alimentary tract, including the esophagus, stomach, small intestine, colon and rectum, 37 per cent of the carcinomas occur in the colon and rectum. These facts suffice to testify to the importance of a thorough examination when signs and symptoms suggest that consideration of the colon and rectum is indicated. The physician who is careful rewards the occasional patient and himself by discovering an early unsuspected malignant lesion at a time when, with all reasonable possibility, cure can be assured, often by a relatively simple procedure.

The surgeon who assigns himself the responsibility and task of dealing with malignant lesions must be familiar with the variety of methods that have been devised, tried and proved efficacious for particular types of conditions and, in addition, must be sufficiently ingenious to combine such methods or conjure up new technical means to apply to individual cases. The important point is that each patient is different from every other patient and each lesion has its own best way of being dealt with; it is the surgeon's obligation to know and use the ideal surgical procedure for each situation.

If a surgeon consistently has "bad luck" with a specific type of operation, the tendency is to blame the operation rather than blame his selection of that operation for the individual. The risks involved in surgery of the colon are high, at best, but if one is to effect a cure, rather than palliation, chances must be taken. However, the right decision as to when to take the risk, and the estimation of the risk, come only with study and experience. By study is meant keeping complete records with follow-up data regarding patients, reading the pertinent literature, research and travel. By experience is meant the sum and substance of all that all surgeons' senses can accumulate by dealing with these patients and the keeping of such knowledge at one's fingertips for use at the proper time. There is no more discouraging feeling than that of wishing one had done something when it already is too late.

Some surgical procedures should be selected only rarely; some should be selected frequently but wisely. Properly selected, there is no operation that should never be done and I say this in spite of the fact that there are some operations that I never have done and probably never will do.

The field of proctology differs in different places. At the Mayo Clinic it excludes resection; such cases fall into the field of the colonic surgeon. The decision in debatable cases is a joint one but doubt usually weighs heavily in favor of resection.

Pedunculated polyps and small, sessile polyps without ulceration and within reach of the proctoscope or sigmoidoscope will practically always be amenable to fulguration, regardless of which wall of the bowel they occupy. They practically always show malignant change of low grade 1, according to Broders' classification. It is of utmost importance that these growths be looked for and be adequately treated by fulguration, as potentially dangerous lesions, despite their small size.

Among the surgical procedures which in my opinion rarely should be done is resection from below, or by the perineal route alone, without combining it with an abdominal approach. An instance when I used such a method with excellent results, however, was the case of a woman forty-two years of age who was four months' pregnant and who had an annular non-ulcerated mobile adenocarcinoma of grade 2, according to Broders' classification, in the midportion of the rectum, which encircled three-fourths of the lumen. The incision in this instance was made between the sphincter and the coccyx. The coccyx was removed and the operation consisted of resection and end-to-end anastomosis. The patient returned later for cesarean section, and follow-up data show her and the baby to be alive and well six years after the surgical procedure.

This case is used as an example because of the divided opinion of consultants. The questions debated involved the wisdom of choosing the method described as compared with colostomy followed by posterior resection or sacrifice of the uterus and fetus by a Porro operation in addition to a one-stage or two-stage combined abdominoperineal resection. Pre-operative decisions are not always simple ones to make. The proof of the correctness of the decision is in the result obtained over "the long pull."

Palliative colostomy naturally falls into any consideration of operations for malignant lesions in the rectum and rectosigmoid as does also an operation which might aptly be termed a potential colostomy.

Regarding the former procedure, when the case

is wisely selected for colostomy and the operation is well done, considerable relief for the patient may be expected. Palliative colostomy should be performed for advanced degrees of obstruction in the presence of local or distant metastasis, or a combination of the two, when in the opinion of the experienced surgeon the degree of spread, the grade of the malignant lesion, and the general condition of the patient justify such an attempt in the human interest.

The type of colostomy that I employ in these instances is one performed through the incision of exploration—a left rectus incision which retracts the rectus muscle laterally. The sigmoid is divided at a selected point, the lower barrel is brought out at the lower angle of the incision and the upper barrel is brought out through a split in the left rectus muscle, after the anterior and the posterior fascia of the rectus have been cut transversely to prevent obstruction. A Payr clamp is left on the lower barrel of bowel and a rectal tube is tied in place in the upper barrel. It is important to separate the two openings to prevent spilling of the fecal contents from the upper into the lower barrel of bowel.

The potential colostomy I do not perform often. It is employed in those instances in which distant metastasis is present but is not extensive, in which the growth is locally inoperable and obstruction, although imminent, is not sufficient to justify immediate establishment of a colonic stoma. It consists of a loop of sigmoid being brought through the fascia of the rectus and left lying under the deep layer of the superficial fascia in such position that if and when it becomes necessary to establish relief of obstruction it can be done simply by a cautery incision without the patient's having to undergo the unpleasantness of a colonic stoma in the interim.

It must be kept in mind that palliative colostomy, on the average and in large series of cases, does not prolong life more than a month or two. Therefore, in determining whether or not to perform this procedure, in fairness to all concerned, one must also evaluate other palliative measures of a medical nature, such as the low residue and eventual non-residue diets.

This paper is concerned with four main surgical procedures for carcinoma of the rectum and rectosigmoid, the selection of one of which, with whatever modifications the individual surgeon may make, will fit the majority of cases that are beyond the stage for fulguration. The four procedures are (1) combined abdominoperineal resection in one stage or in two stages with abdominal colostomy; (2) combined abdominoperineal resection with preservation of the sphincters; (3) anterior resection with anastomosis, and (4) colostomy and posterior resection.

In discussing the four surgical procedures, I do so cognizant of the fact that there are some surgeons who believe that anterior resection and anastomosis should never be performed for lesions of the rectum and very rarely for those in the rectosigmoid; also that there are those who are convinced that combined abdominoperineal operation with preservation of the sphincters is not a good operation. However, I have also noted that those who would appear to be opposed unalterably to this latter technique have never seen it performed by those who have performed many such operations.

Combined Abdominoperineal Resection in One Stage

Giordano, in 1896, as far as records can be found, performed the first combined abdominoperineal resection without establishing a preliminary colostomy. Miles, however, can be credited with putting on the map the one-stage abdominoperineal procedure with establishment of a single-barrel colostomy.

Up to and including the present, the one-stage combined abdominoperineal resection is, in principle, my choice of surgical procedures for malignant lesions of the rectum and rectosigmoid. Like other surgeons, I have developed a technique, operative and postoperative, which has worked out well for my service, and my experience with the operation prompts the following evaluation.

1. It is an operation that can be done in any case of malignant lesion of the rectum or rectosigmoid in which any other radical procedure can be accomplished.

2. The mortality rate for the operation in the high risk patients or in the aged is no greater, or may be less, than in other single or multiple-stage operations.

3. It is the most reasonably radical of surgical procedures for malignant lesions of the rectum and rectosigmoid.

4. Abdominal colostomy, properly performed, is neither a stigma nor difficult to control in the vast majority of cases.

5. The ultimate prognosis will average best following one-stage combined abdominoperineal resection.

6. There are instances in which the operation may be carried out as a palliative procedure with benefit to the patient in the presence of known metastasis to the liver.

In my total series of 296 cases of one-stage combined abdominoperineal resections from April, 1934, to January, 1943, when my work was interrupted by the war, 278 patients survived the operation, a mortality rate of 6.1 per cent. Eleven cases were designated as palliative. Among the 285 non-palliative cases, in 141 (49.5 per cent) local extension or nodal involvement was found at the time of operation. Of the 267 survivors in the non-palliative group, all patients were traced except one and this case necessarily was omitted from our calculations.

Of the 266 remaining cases in the non-palliative group, there were 133 cases in which there was no local extension or nodal involvement and the liver was found to be free of metastasis. In this group of 133 cases, the three-year survival rate was found to be 86.3 per cent and the five-year survival rate was 72.5 per cent.

In this non-palliative group, there also were 133 cases in which there was local spread of the malignant process, including five cases in which questionable involvement of the liver was noted at the time of operation. In this group, the three-year survival rate was found to be 57.2 per cent and the five-year survival rate 37.9 per cent.

For the total non-palliative group, the three-year survival rate was 71.9 per cent and the five-year survival rate was 55.8 per cent.

Combined Abdominoperineal Resection in Two Stages

I have not performed a two-stage operation for lesions in the region under discussion for twelve years. It is my opinion that a one-stage operation is at least as immediately safe and, on the basis of the factor of time as related to morbidity, can be supported on all counts. In other words, it would be a most rare instance in which I would select a two-stage operation as opposed to a one-stage procedure.

Anterior Resection and Primary Anastomosis

Surgeons, as related to their opinion of anterior resection for malignant lesions in the rectum and rectosigmoid, fall into two distinct groups: (1) those unalterably opposed to it and (2) those who believe that there are instances in which it is the operation of choice. Those who believe that it is not the operation for the region of bowel under discussion do so on the basis that it is not a radical enough operation and because of the frequency of sequelae, such as stricture.

Those surgeons who do perform anterior resection do so with varying frequency. It is rarely that such an operation is attempted when the growth is situated 6 cm. or less from the anal margin. Dixon, in reporting 340 cases, had ninety cases in which the lesion was situated between 6 and 10 cm. from the anal margin, 132 from 11 to 15 cm., and 118 from 16 to 20 cm.

Some surgeons who employ this operation always perform primary defunctioning transverse colostomy, followed later by resection and still later by closure of the stoma, making a three-stage operation. Others perform primary resection and anastomosis without colostomy.

Personally, I do not often perform anterior resection for lesions of the rectum or rectosigmoid, preferring the one-stage combined abdominoperineal resection. When I do select it, the lesion must be mobile, non-penetrating and non-ulcerating. My objection to the operation in general is that it is not sufficiently radical. Selection of it depends also on a clean colon, inasmuch as I rarely employ preliminary colostomy and in at least half of the instances I perform a modification of the "pull-through" operation described by Balfour, in which a rectal tube is tied into the upper barrel of colon and intussuscepted or invaginated into the rectum.

Combined Abdominoperineal Resection With Preservation of the Sphincters

This operation has been abused more than is its due. Among its advocates in this country have been Babcock, Bacon and Waugh. I have performed several operations of this type. When properly performed, it is as radical or almost as radical as the usual combined type of operation. There is agreement that growths situated less than 6 cm. from the anal margin should not be removed by this method. Reports of satisfactory control by the preserved sphincters run as high as 80 per cent. Technically, the operation is but slightly more complicated than the usual one-stage combined abdominoperineal resection. The tendency now in

dissecting out the anus and lower portion of the rectum is not to cut but to stretch the sphincters sufficiently for delivery of the dissected portion of the bowel and the growth. The patients on whom I have performed this operation have had a somewhat more stormy convalescence and have complained more frequently of pain and vesical complications than have those who have undergone the usual one-stage combined procedure. However, it is an operation that may well grow in favor as refinements develop, and certainly it has a definite place in the list of operations for malignant lesions of the rectosigmoid and of the rectum situated more than 6 cm. from the anal margin.

Colostomy and Posterior Resection (Two-Stage)

The operation of performing a loop sigmoid colostomy and later performing a posterior resection is one of the old stand-by operations for attacking the growths under discussion. To belittle the procedure which has stood patients and physicians in such good stead would be an injustice, would show ingratitude. This operation is still performed and with greater frequency than many suppose. Personally, I do not use the method since other operations have superseded it. Other than the fact that it is a stage procedure, it is definitely not as radical as the combined abdominoperineal resection, nor is it any safer. One other objection that I have to the posterior resection is that there seems to be no satisfactory way of dealing with the lower segment of sigmoid between the stoma and the pelvic peritoneum unless it is removed later. Posterior fistula from the stump to the perineal scar is fairly common, regardless of whether the inverted stump of sigmoid is placed above or below the peritoneum.

There may be instances in which posterior resection can be used and in which it is useful, but for me, colostomy followed by posterior resection is a part of the historical record of the progress of colonic surgery rather than an operation to be performed in the present day.

Conclusions

If I were to have available but one operation for malignant lesions of the rectum and rectosigmoid, I should select the one-stage combined abdominoperineal resection as having, in my opinion, satisfied most nearly the requirements for the care

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Surgery of the Pancreas and Lower Biliary Tract

By George Crile, Jr., M.D.
Cleveland, Ohio



THIS DISCUSSION OF surgery of the pancreas and lower biliary tract is more a statement of the problem than a presentation of its solution. Despite the remarkable advances in physiology and technique that have enabled us to attack problems which were formerly considered hopeless, much remains to be done before we can feel satisfied with the end results of treatment. In most cases of carcinoma, diagnosis is still established too late to enable treatment to represent more than palliation. And in the case of pancreatitis the etiology of the disease is still in dispute, and the treatment is of necessity empiric and unsatisfactory.

Chronic Recurrent Pancreatitis

The type of pancreatitis which I wish to discuss is not the familiar acute or hemorrhagic pancreatitis which goes on to death or recovery but is the so-called chronic recurrent pancreatitis described by Comfort.[2] This disease is characterized by recurring episodes of pancreatic pain often occurring with progressive frequency, intensity, and duration over a period of many years and frequently resulting in loss of much weight, in chronic invalidism, and occasionally in addiction to morphine.

Chronic recurring pancreatitis is probably more common than is generally recognized. In the past year I have encountered four proved, one probable, and two or three possible cases of the disease. A careful analysis of all cases of upper abdominal pain, unexplained by disease of the stomach, duodenum, or gall bladder, will unquestionably reveal increasing numbers of these cases.

There is no known specific medical or surgical treatment for chronic recurrent pancreatitis. In

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Dr. Crile is a member of the Cleveland Clinic, Cleveland, Ohio.

some instances drainage of the gall bladder or common duct appears to have resulted in improvement of the symptoms, but in the more severe cases this has not invariably been true. The surgeon is more apt to encounter patients exhibiting what appears to be one of the complications of recurrent pancreatitis, i.e., pancreatic lithiasis.

The majority of cases of chronic recurrent pancreatitis that I have seen have exhibited the complication of pancreatitic calcification. In six of eight cases, the calcifications were distributed throughout the entire pancreas and were accompanied by marked fibrosis of the entire organ. The question arises as to whether the stones are the cause or the result of pancreatitis. Although this point is difficult to prove, Dr. Comfort has seen cases in which the calcification appeared and progressively developed while the patient was under treatment for chronic pancreatitis.

It seems probable that the inflammatory process results in a deposition of calcium in the pancreatic tissue.

Calcified areas of the parenchyma may separate and accumulate in the ducts, and in many instances the main pancreatic duct becomes obstructed by the calcified material. Chemical studies of pancreatic calculi show that they are composed of calcium carbonate and this is deposited around a nucleus of tissue-like material which does not dissolve in acids. This finding lends further support to the belief that the stones are the end result of calcification of the parenchyma of the pancreas.

Insufficiency of both external and internal secretions of the pancreas may occur as a result of progressive fibrosis and atrophy. The insufficiency of the external secretion may be increased by obstruction of the duct by stones. This obstruction may well produce further fibrosis of the parenchyma and eventually may cause further destruction of the already damaged islet cells. Diabetes is therefore a common complication of chronic recurrent pancreatitis. Table I shows an analysis of eight cases of pancreatic lithiasis.

I have had no experience with the surgical treatment of chronic recurrent pancreatitis prior to the development of calcifications. In one case, the common bile duct and gall bladder were distended, in spite of the absence of jaundice, and it is conceivable that drainage of the biliary tract or a cholecysto-enterostomy might have afforded relief. In the other cases, there was no evidence of disturbance of the biliary tract, and it is difficult to see how drainage could have altered the symptoms.

TABLE I. EIGHT CASES OF PANCREATIC CALCULI

Age: 21 to 50 Av. 42	
Sex: 7 male 1 female	
Duration: 6 wks. to 18 yrs. Av. 7½ yrs.	
Loss of wt.: 10 lbs. to 80 lbs. Av. 38 lbs.	
Pain: Epigastric or RUQ colic	
Radiation: Back, 4; L. shoulder, 1; R. shoulder, 1	
Pain follows meals	3
Diarrhea	3
Fat in Stools	2
Vomiting	5
Hematemesis	1
Diabetes	5
Amylase: not done, 4 normal	4
Alcoholism	2
Operation	5
Removal of calculi	1
Pancreaticoduodenostomy	3
Resection	1

Since the most severe and intractable cases of chronic recurrent pancreatitis appeared to be those in which calcifications develop, it is entirely possible that the calcifications, by blocking the pancreatic duct, contribute materially to the pancreatic insufficiency and to the pain. It was hoped, therefore, that simple removal of the calculi might result in relief of symptoms.

The literature contains reports of fifty-eight cases in which stones have been removed from the pancreas, but unfortunately the progress of these patients following operation is rarely recorded, and there is no way of judging whether or not lasting relief of symptoms has been obtained. Judging from our experience I doubt if the results of simple pancreatolithotomy have been good. In the first place, the calcifications are diffusely scattered throughout the entire pancreas and are not confined to the main duct. In every case there was a central deposit of dense calcium sometimes forming an irregular single calculus as large as 2 cm. in diameter located in the head of the pancreas, just proximal to the junction of the pancreatic duct with the duodenum. Removal of this main calcification presents no difficulties, and the obstruction to the flow of pancreatic juice apparently is relieved following its removal. But the calcifications in the parenchyma of the organ and in the finer ducts are rough, adherent, crumble easily, and are impossible to remove completely even when multiple incisions into the main pancreatic duct are made. Even if enough of the stones could be removed to relieve the obstruction, what assurance would one have that the stones in the finer radicles would not move down into the main duct again, block the flow of pancreatic juice, and cause pain?

It was hoped that making a large anastomosis between the dilated pancreatic duct proximal to

the obstruction and the duodenum might avoid this contingency and afford lasting relief from the symptoms of obstruction. Pancreatoduodenostomy was therefore done in two cases.

The duodenum was mobilized, reflected medially, and the pancreatic duct anastomosed to an opening about 2 cm. long in its wall. One of these patients obtained immediate relief of the constant pain, which had necessitated his taking morphine in increasing doses for the past year, and left the hospital in ten days free of pain and taking no morphine. Within a week, however, the pain recurred and, according to the patient, has persisted and requires the continual use of morphine. It is difficult to evaluate the result in this case because the issue is clouded by the possibility of addiction.

In the second case, the same operation was performed and has been followed by complete relief of pain, gain in weight, and subsidence of the fatty diarrhea. At times the patient still has as many as five or six stools a day, but this is comparable to from fifteen to twenty before operation. He feels well and has returned to work. The severity of the diabetes has not changed. It is now six months since operation.

In the third case, a large mass of calcium carbonate was removed from the pancreatic duct in the head of the pancreas. Following this an attempt was made to follow the duct through into the duodenum, and in attempting to introduce an instrument, there was a sudden release of obstruction and the instrument plunged through into the bowel. It was impossible to state with certainty whether this passage was through the pancreatic duct or whether it was a false passage. In any case, one limb of a large T tube was placed through the opening into the duodenum, the other was left in the proximal part of the pancreatic duct, and after closing the pancreas around the tube the stem was brought out through the abdominal wound.

The patient's convalescence was uneventful, but his subsequent progress has been difficult to evaluate. His attacks prior to operation had come at irregular intervals varying from a week to a month apart. In addition, he was a chronic alcoholic, poorly controlled by his association in Alcoholics Anonymous. Soon after his discharge from the hospital and while the T tube was still in place and draining clear pancreatic juice, and while the distal limb was lying unobstructed in the duodenum, as proved by roentgenogram after injection of opaque material, the patient experienced as protracted and severe an attack of pancreatic pain as he had ever had. A course of x-ray therapy to the pancreas gave no relief. After about ten days the symptoms subsided, and for the past three months he has been quite well with only occasional attacks of pain. When the pain occurs he sometimes uses alcohol. The T tube was removed a week ago (three months after operation), the sinus is still draining pancreatic juice, and the patient is free of pain. It is as yet too early to evaluate the final result, but it is significant that a typical attack of pancreatic pain occurred while the pancreatic duct was unobstructed and draining freely both externally and into the duodenum.

This experience suggests that the pain may be related to a persistence or recurrence of the inflammatory process in the pancreas or to obstruction of the finer radicals by small calcifications. It is also possible that the T tube may have contributed to the pain and that, following its removal, the patient will obtain relief of his symptoms.

My first experience with pancreatic lithiasis was in the U. S. Naval Hospital, San Diego. A young man gave a history of repeated severe hemorrhages from the upper gastro-intestinal tract and of recurrent episodes of severe, upper abdominal, colicky pain. This case has been reported in detail,[3] but the significant findings were a filling defect demonstrable by roentgenogram and fluoroscopy in the second portion of the duodenum.

At operation a fistulous tract was found leading from the second portion of the duodenum into the head of the pancreas.

A number of large and small stones were removed through this tract, following which there was a gush of pancreatic juice under pressure. In this case the calcification was confined to the head of the pancreas. The patient remained well for a year but then developed some recurrence of pancreatic pain. It is not known whether the calcifications have recurred.

In the fifth operated case, the calcifications were confined to the head of the pancreas, and the common duct and gall bladder were dilated. Dr. T. E. Jones resected the involved portion of the head of the pancreas, divided the duodenum, placed the cut end of the pancreas into the proximal end of the duodenum, left a T tube in the common bile duct, and re-established gastro-intestinal continuity by means of a gastro-enterostomy. Con-

valescence has been uneventful, but it is too early to evaluate the results.

Cancer of the Pancreas

The unfavorable prognosis associated with carcinoma of the pancreas is not dependent upon any unusual degree of malignancy of its tumor or upon the technical difficulties associated with their removal. Carcinomas of the pancreas have an unfavorable prognosis simply because the diagnosis is not made until the tumor is of such size that it has invaded and obstructed an adjacent organ—the common bile duct—or until it has metastasized or penetrated its capsule to cause pain. If we were unable to make the diagnosis of carcinoma of the sigmoid until parietal pain or evidence of obstruction of a ureter or an adjacent loop of small bowel were present, the situation in regard to curability of these lesions would be comparable. It is axiomatic in treating cancer that once the tumor has extended out of the organ in which it originated, the prognosis is poor. What is needed, therefore, is a means of establishing the diagnosis while the tumor is still confined to the pancreas. Although it is possible that measurements of the external secretion of the pancreas may lead to an accurate way of establishing the diagnosis of obstruction of the pancreatic duct at a time when the tumor is curable, at the present time there is no way to establish the diagnosis of carcinoma of the body of the pancreas before it has advanced to an incurable stage.

The indefinite symptoms of loss of weight and vague, upper abdominal distress are scarcely sufficient to bring the patient to his physician, and by the time that progressive loss of weight and pain have led to the suspicion of an organic lesion, the disease is almost always incurable.

I know of no instance of a cure following resection of a carcinoma of the body or tail of the pancreas except in those rare instances of islet cell tumors exhibiting symptoms of hyperinsulinism. Exploratory operations for lesions in this location are justifiable only in that occasionally the diagnosis is erroneous and some unsuspected and correctible condition is found.

Carcinomas of the head of the pancreas carry a somewhat more favorable prognosis. When the tumor arises in proximity to the common bile duct and jaundice occurs early, the lesion may be resectable. If there is not too much delay in surgical exploration the mortality rate of radical pancreatoduodenectomy is now reasonably low, but if the jaundice is allowed to continue for months before the diagnosis is established, the liver is irreparably damaged, and the mortality rate following even palliative procedures is high.

As an example of the potential curability of some of these tumors, a man thirty-seven years old was subjected to radical pancreatoduodenectomy for a highly differentiated carcinoma of the pancreas. This was before the discovery of vitamin K, and it was necessary to restore bile to the intestinal tract before resecting the tumor. A cholecystogastrostomy was performed, and later the pancreas and duodenum were resected. The patient lived in good health for over a year but then developed chills, fever, and jaundice, and died. It was assumed that the obstruction was due to a recurrence of the carcinoma, but autopsy revealed a stricture of the cholecystogastrostomy and no recurrence of the tumor. It is quite likely that this patient would have remained well if the stoma had not contracted.

The mortality rate increases in direct proportion to the duration of the jaundice. A favorable case from the standpoint of permanent cure may end fatally as a result of delay in advising operation.

A man fifty-nine years of age who had been jaundiced for more than six months was found at operation to have a highly differentiated carcinoma of the ampulla of Vater. Radical resection was performed, but the patient died on the fourteenth day after operation with dehiscence of all anastomoses and of the abdominal wound. Autopsy showed no evidence of metastasis. The powers of healing had been so profoundly altered by the long-standing jaundice that the patient could not survive.

A minister of seventy-eight, on the other hand, was recently subjected to radical pancreatoduodenectomy for cancer of the pancreas. His convalescence was uneventful, he left the hospital in two weeks, and one month after operation preached a sermon. This patient had been jaundiced only three weeks prior to operation.

The development of a complete obstructive and relatively painless jaundice in an elderly man, associated with a high icteric index, absence of bile in the stool, absence of urobilin in the urine, and the presence of palpable liver and gall bladder, suggest the diagnosis and justify an exploratory operation. The tests of liver function are of

little value in the differential diagnosis of a deeply jaundiced patient.

If the patient is obese and the gall bladder cannot be felt, peritoneoscopy will furnish the desired information as to its size and appearance. If the appearance of the liver and gall bladder are consistent with obstruction of the lower biliary tract, operation should be performed as soon as is practicable. The one-stage procedure is preferable if the duration of the jaundice is short.

If the pancreatic duct is implanted into the intestine the undesirable complication of pancreatic fistula is avoided, and more important, the patient does not suffer from a deficiency of the external secretion of the pancreas. Some patients do well without pancreatic juice, but others have much difficulty in maintaining nutrition in its absence. Since there is no way of predicting before operation whether the patient will or will not get along without pancreatic juice, it is better to anastomose the pancreas to the gastro-intestinal tract, either by inserting its cut end into the open end of the jejunum[1] or by an end-to-side pancreaticojejunostomy.

The fact that so many procedures have been advocated for re-establishing gastro-intestinal, biliary, and pancreatic continuity, indicates that individual anatomic pecularities render each case an individual problem. From the physiologic viewpoint, however, a technique whereby the pancreatic duct and common bile duct are implanted proximally to the gastro-enterostomy has the advantage of keeping the pancreatic and biliary anastomoses out of contact with the stream of food, thus avoiding ascending infections.

Summary

1. Eight cases of pancreatic lithiasis are discussed. Five have been subjected to various types of pancreatolithotomy and pancreatoduodenectomy.

2. Pancreatic lithiasis is probably a result of chronic recurring pancreatitis.

3. Neither the cause nor a satisfactory treatment for chronic recurrent pancreatitis is known.

4. There is no known means of establishing a diagnosis of carcinoma of the body of the pancreas at a time when the tumor is curable.

5. Carcinoma of the head of the pancreas and lower bile ducts carries a more favorable prognosis than carcinoma of the body.

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Spinal Anesthesia

By Ivan B. Taylor, M.D.
Detroit, Michigan



This presentation on spinal anesthesia is a discussion of the particular method without trying to compare it with other types of anesthesia. Such comparisons are mainly of local interest because they depend so much upon the limited condition of a particular hospital and its staff. The following observations are based on information obtained from all that has been learned from others, plus observation during spinal anesthesia and care of the patient throughout the operation. It is my contention that care of the patient after the injection is quite as important as the introduction of the drug.

Anatomy

A brief discussion of important anatomical considerations is indicated. The neural canal through which the spinal dura and its contents pass is formed by the vertebrae. We are interested in the normal curves of the spine. The neural canal is not horizontal when the patient is in supine position even though the operating table is level. The lumbar region presents a ventral curve with sloping in both directions. In the lateral position the neural canal can be kept nearly in the horizontal plane by adjusting the table.

The tips of the lumbar transverse processes are broad in the up and down dimension, the space between them may be narrow. In some of the patients this space may be increased by flexion of the back, while in others it is rather well fixed. The depth to the dura at the second to third lumbar space is not as great in most patients as the length of the 3 to 3½ inch needles commonly used.

Sensory nerve supply levels that one should remember are: perineum—sacral nerves; legs—lumbosacral; inguinal—twelfth thoracic; umbilicus—tenth thoracic; zyphoid—seventh thoracic; nipple—fourth thoracic. The phrenic nerves arise from cervicals three, four and five.

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The spinal nerves are fixed only where they pass through the dura laterally. At this point a needle could damage them; centrally they are free to move away from a needle. Also there are fewer blood vessels in the central line of the dura than laterally. The anesthetic drug acts on the nerve roots, therefore one should know the levels at which they leave the dura. The structures which the spinal needle may contact that contain the most pain receptors are the skin and periosteum. The former can be locally anesthetized; the latter should be avoided with the needle. Careful study of a skeleton is recommended to help keep the bony landmarks in mind.

Drugs

Features common to all drugs. There are many characteristics that are common to nearly all drugs used in spinal anesthesia. Some of these may vary in degree between the drugs, but there will also be variations with different patients using the same drug.

Spinal anesthetic drugs in solution are injected into the cerebrospinal fluid of the spinal dura. The drug mixes with the fluid which surrounds the spinal nerve roots and the spinal cord. The nerve impulses are blocked primarily in the spinal nerves where they are bathed in a sufficient concentration of the drug. While the quantity of cerebrospinal fluid that will dilute the drug after it is injected is not known, most of the drugs are injected in small volume with the idea that they will be rapidly diluted. When large volumes and low dilution are injected there may be considerable displacement of cerebrospinal fluid upward with diffusion at both ends of this volume injected.

In general, the amount of circulatory depression caused by spinal anesthesia is not a characteristic of the drug used; it is more dependent upon the amount of body anesthetized and the time in which the anesthesia is produced. This time element is usually a factor of technique and not a specific property of the drug. To illustrate, a given patient will have less circulatory depression if ten minutes are required to produce anesthesia from the perineum to the nipples than if the same level of anesthesia is produced in three minutes with the same drug. There is one circumstance in which circulatory depression may be a specific action of the drug and that is in the occasional case where systemic reaction may be produced from subarachnoid injection, the same as from local infiltration. These reactions have been observed with relatively small doses and very limited area of the body anesthetized.

The solution of the drug should be distinctly heavier or lighter than the cerebrospinal fluid in order to employ the element of gravity in controlling the level of anesthesia. The importance of this difference decreases somewhat when a large volume and lower concentration are employed.

Hyperbaric drugs tend to gravitate downward. The importance of position in this gravitation diminishes after the first ten minutes and is greatest in the first three minutes after injection. Diffusion alone is not sufficient to produce high levels of anesthesia. This has been demonstrated by injecting drugs in the usual concentration at the lowest portion of the dura. However, large volumes of a more dilute drug injected in this area can produce high anesthesia as has been demonstrated with accidental intradural injections during sacro-caudal anesthesia.

Drugs that can be used in 3 to 5 per cent concentration, such as procaine, metycaine and monocaine, have a greater specific gravity than cerebrospinal fluid. If the drug is used in crystalline form and dissolved in the patient's cerebrospinal fluid the increase of specific gravity over the patient's cerebrospinal fluid will be a constant factor when the same percentage is used. In the use of drugs such as pontocaine and nupercaine, where the maximum dosage is 20 to 12 mg. instead of 200 to 150 mg., there will not be much change in the specific gravity. Nupercaine is frequently used in a prepared solution of 1:1500 which is distinctly lighter than cerebrospinal fluid. Two methods are commonly employed to make a solution heavier (hyperbaric) and can be done by the administrator at the time of injection. One is to add 50 to 100 mg. of procaine to the solution, the other is to add equal parts of 10 per cent sterile dextrose making a 5 per cent dextrose solution which has sufficient specific gravity to behave very similarly to 5 per cent procaine.

In my experience, the longer-acting drugs have been the only ones to produce permanent or prolonged nerve damage resulting in prolonged anesthesia or bladder paralysis. This may mean that the therapeutic equivalents are not correctly estimated, and if the drugs were given in exactly equivalent effective dosages, the time of action probably would be nearly the same.

The safety factor of drugs is a very difficult one

to determine. The number one factor in safety rests with the administrator of the drug, and that includes taking care of the patient throughout the operation. The safety of spinal anesthesia given by single injection becomes less when one tries to increase the time and when larger areas of the body are anesthetized. Assuming correct administration and use of the drug, the dangers shift to those of choice of patient and type of operation.

The arithmetic involved in determining the percentage to be used is not complicated, but since the quantities are in milligrams some find it confusing. Therefore it is best to memorize a few sample percentages. To produce a 5 per cent solution, each 50 mg. must be dissolved in one c. c. of fluid; hence, 100 mg. in 2 c. c., 150 mg. in 3 c. c.; whereas to produce 3 per cent solution, 50 mg. are added to 1.6 c. c. For drugs that come in solution, one needs to remember that 2 c. c. of 10 per cent solution contains 200 mg. of the drug and that the amount must be carefully measured in a syringe because the ampuls are filled to permit withdrawing 2 c. c. and do not always contain exactly that amount. This 10 per cent should be diluted in equal parts to produce 5 per cent. Furthermore this may not be the proper dosage and the extra solution should be discarded before attaching the syringe to the spinal needle. It cannot be emphasized too strongly that the amount of drug in an ampul is not always the proper or safe dose of that drug.

Procaine hydrochloride is the earliest drug used in spinal anesthesia that is in common use today. It is one of the least potent drugs used, but that also gives it an element of safety. Procaine is available in sterile ampuls in solution and crystaline form. The crystals are best for general use. It is sold under trade names such as "Novocaine" and "Neocaine," as well as procaine. When the crystals are dissolved in cerebronspinal fluid, the resulting solution is heavier than the patient's cerebrospinal fluid. It should never be used in higher than 5 per cent concentration, but may be used more dilute.

The dosage used is varied, depending on the amount of the body to be anesthetized, the duration of anesthesia desired, and the size and age of the patient. The maximum dose for a single injection has arbitrarily been suggested not to exceed 200 mg. However, others have chosen a safer maximum dose of 150 mg. With 150 mg. one rarely produces respiratory paralysis sufficient to be troublesome. Of course, respiratory arrest can result secondarily to severe circulatory depression. The duration of spinal anesthesia with procaine depends upon the condition of the patient, dosage used, and the area of the body anesthetized. One does well to provide one hour of operating time with 150 mg. for an upper abdominal laporotomy, but one and one-half to two hours can be produced for perineal surgery with the same amount. Procaine anesthesia generally terminates rather rapidly. That is, in five to ten minutes after the first return of motor control there may be complete return of sensation resulting in severe pain. This requires prompt addition of some other type of anesthesia unless the operation is nearly over when motor control and beginning return of sensation occurs. It may also require prompt use of postoperative analgesic drugs in cases where wounds are particularly painful. This rather abrupt disappearance of anesthesia is generally not a desirable characteristic. Procaine usually produces skin anesthesia four to six segments above the level of motor paralysis, which is a good feature.

Metycaine is more potent than procaine, so that one can obtain about the same results with a smaller dosage. Rarely should single doses of 150 mg. be exceeded. This drug is supplied in ampuls containing 10 per cent solution. It should never be injected without being diluted to at least 5 per cent. Cerebrospinal fluid is used to make this dilution.

Pontocaine has commonly been considered to have an equivalent potency ten times that of procaine. It has been widely used to produce more prolonged anesthesia. It is available in 1 per cent solution and in a powder form, both in ampuls. Two c. c. of 1 per cent solution contain 20 mg., an amount that should rarely be used. It should be diluted to .5 per cent or less before injection. It is not difficult to produce enough respiratory paralysis with 18 to 20 mg. to cause respiratory difficulty. One and one-half to two hours anesthesia can usually be produced with 16 mg. for an upper abdominal operation. In contrast to procaine, the complete disappearance of anesthesia rarely occurs rapidly. The return of sensation is more gradual, which allows for more time to produce anesthesia if supplement is indicated and makes for less severe postoperative pain when the operation has been completed before termination of anesthesia.

Nupercaine is the most potent of the drugs used for spinal anesthesia. It is commonly used in the 1:1500 dilution furnished in ampuls containing 20 c.c. This solution is lighter than cerebrospinal fluid, hence requires different technique of administration. It is also available in a 1:200 dilution. This concentration should not be used without dilution. Personally I do not think any dilution less than 1:1000 should be used. However, 1:400 dilutions are being used. They should not be generally employed until more proof has been furnished of the safety of such concentration.

Technique

It is not my intention to set forth a definite technique but rather to point out several things that have been useful in teaching this type of anesthesia.

The lateral position is most satisfactory for inserting the spinal needle, the body should be flexed, but the patient rarely needs to be held forcefully. If the proper position cannot be voluntarily maintained by the patient, one's technique is faulty or else the patient is a poor candidate for this type of anesthesia. The patient should be told what to expect before preparing the skin, and before palpating the back. Palpation should be done with two fingers of the left hand gently. One can feel more with gentle palpation with the fingers than poking with a thumb. The commonest error beginners make while inserting the spinal needle is that they expect the dura to be deeper than it is and they touch the posterior wall of the neural canal before withdrawing the stylet. At the second to third lumbar interspace one rarely uses all of a 3-inch needle, the average depth being about 2 inches. With a very sharp 20 to 22 gauge steel needle, one rarely feels it enter the dura. The resistance of the internal ligaments generally can be felt. Puncturing the dura centrally is highly desirable because there are fewer blood vessels there, and the nerve roots will not be damaged because they can move away from the needle; whereas laterally they are somewhat fixed where they traverse the dura. The cord may extend to the body of the first lumbar vertebra so the needle should not be inserted above the 12th dorsal spine.

The prophylactic use of a dependable vasopressor drug is generally advisable. To be effective this drug must be absorbed into the circulation in sufficient quantity to be acting before the blood pressure drops. This means it must be given ten to fifteen minutes before the spinal injection, if given subcutaneously. It is best that the anesthetist administer this drug intramuscularly laterally in the muscles of the back through the skin wheal. Given this way it will be absorbed rapidly. With the doses usually employed we have found it best to do this right after the wheal is made, before the spinal needle is inserted.

The control of the level of anesthesia is very important. A few general features should be kept in mind in order to use specific maneuvers with intelligence. The anatomical curves of the spine have been pointed out previously. These are particularly important in influencing the gravitation of the drug injected. One must know the relationship of the specific gravity of the solution injected to the cerebrospinal fluid. Gravitation is a much more important factor in the dispersion of the injected drug than diffusion. The smaller the volume injected, the more important gravitation becomes.

The larger the area of the body to be anesthetized the more drug will be required to produce the same duration of anesthesia in a given patient. Limiting the dosage injected at one time becomes a safety factor because smaller doses will become too dilute to cause extremely high level of anesthesia in the average patient. The length of the spine and volume of cerebrospinal fluid are more important in determining the proper dosage than the weight of the patient. The better the patient's circulation, the shorter will be the duration of the anesthesia. The circulatory depression will be less if the anesthesia is allowed to ascend slowly. That is, producing anesthesia to the nipple line in three minutes will cause marked blood pressure drop more frequently than producing the same level of anesthesia over eight to ten minutes. However, with the same dosage the fast method will produce a longer duration of anesthesia for an upper abdominal operation.

It is of paramount importance to check the level of anesthesia often and carefully if one wishes to learn to improve his control over the level of anesthesia. The general existing concept is that the level of anesthesia is "fixed" in ten minutes. This is not always true. The term "fixed" may be interpreted to mean that the drug has been removed from the fluid by the nerve or other tissues; it may be used in the simpler and more accurate sense, namely, that the anesthesia level will not change. Studies have been reported and are now under way that show recovery of considerable amount of pro-

caine from the cerebrospinal fluid. Also, one can often cause the anesthesia to disappear in five to ten minutes by withdrawing 15 c. c. of cerebrospinal fluid during continuous spinal anesthesia. I have observed the level of anesthesia ascend over a thirty-minute period after the injection. This is most apt to occur when a hyperbaric drug is given in sizable dosage and kept at a low level for some minutes followed by a steep Trendelenberg position, as in many other instances, the final level being limited by dilution of the drug to a point where it no longer produces anesthesia.

All the commonly used drugs except nupercaine produce anesthesia shortly after they come in contact with the spinal nerves in anesthetic concentration. Specific factors in the control of the level of anesthesia are:

1. Specific gravity of injected solution: heavier —hyperbaric; lighter—hypobaric; same—isobaric.
2. Position of patient during and after injection.
3. Rate of injection.
4. Dosage.
5. Concentration.
6. Level of injection.
7. Anatomical differences.
8. Consistency in technique employed.

1. *Specific gravity of anesthetic solution.* It has been found necessary for the solution injected to have a specific gravity either definitely greater or less than the cerebrospinal fluid in order to predict in any measure its behavior after injection. This is less important with dilute solutions and low concentrations. This difference in specific gravity makes for considerable control of the dispersion of the drug in the subarachnoid space. It also influences the diffusion factor. However, one should not use unsafe concentrations of the drug nor excessive dosage to produce this difference in specific gravity. In my experience the use of dextrose has been a safe method of producing the desired increase. A solution containing 5 per cent dextrose behaves very similarly to 5 per cent procaine solution. Some prefer still greater increases in the specific gravity such as adding of the dextrose to procaine solutions.

2. *Position of patient during and after injection.* In order to make the best use of the factor of gravitation one must use different positions of the patient. To produce only perineal anesthesia for prolonged time, fairly large doses of hyperbaric drug may be given and limited to the caudal end of the dural sac or one may wish to produce anesthesia of shorter duration with a small amount of drug. This may be done by making the injection with the patient sitting and kept sitting five minutes after injection. About the same results can be obtained in the lateral position by elevating the head of the table before the injection and keeping it elevated after the patient is turned in the supine position.

In producing spinal anesthesia for a mid-thigh amputation using a hyperbaric solution, one should place the operative side down, inject the solution very slowly and leave the patient on the side for five minutes. This will produce anesthesia in the operative side first and longest. It blocks both the motor and sensory roots on that side and causes less circulatory depression because a smaller area of the body is subjected to spinal anesthesia in the first five minutes. Also one can produce a longer duration with a given dose, or if a longer time is not needed the dosage can be reduced.

The level of anesthesia for abdominal operations reaches into more vital areas of the body. Lower abdominal operations require skin anesthesia to the zyphoid, and upper abdominal operations require skin anesthesia to the nipple line. The motor paralysis is usually a few segments below the sensory block. A hyperbaric solution injected between the second and third lumbar spinous processes gravitates into the dorsal region with the patient lying in the supine position even with the operating table level. The patient should be turned on his back immediately after the injection is made. At three minutes after the injection the anesthesia level is checked. If it is progressing upwards and is at the umbilicus at three minutes, it will go high enough for a lower abdominal procedure without lowering the head of the table. In most patients it will also go high enough for an upper abdominal operation. However, a check at four minutes is made to make sure of the rate it is ascending. Changing the level of the table at three minutes will still influence the rate and the level to which the anesthesia ascends. To be sure, it is more effective in the first three minutes, but it should not be used unless one's technique definitely requires such early change. Putting the head of the table down right after the injection produces high anesthesia rapidly and also a maximum incidence of marked drop in blood pressure.

3. *Rate of injection.* A rapid injection generally makes the anesthesia level ascend quicker than a slow injection of the same amount. A very slow injection may be desirable when only unilateral anesthesia is necessary. One may choose to make considerable use of the variable in the control of the level, but in general it is a factor that can be kept fairly constant.

4. *Dosage.* The dosage of any single injection is limited because of the danger of respiratory paralysis. Small doses may be used to produce perineal anesthesia provided the drug is given so that it will gravitate into the caudal end of the dura without being dispersed throughout all the spinal cerebrospinal fluid. Dosage, when kept in the safe range, is more a factor controlling the time of anesthesia than the level.

5. *Concentration and dosage really are inseparable.* One should use only safe concentrations. This also determines the volume of fluid injected. It is best to keep concentration constant; this will vary the volume with the dosage. There is no objection to the use of low concentrations and large volume if one is familiar with the proper technique of its use.

6. *Level of injection.* This is of importance in relation to the lumbar curve. The solution may be deposited so that most of it gravitates caudad when one wants anesthesia for the upper abdomen. Therefore the needle should not be inserted below the lumbar second to third interspace for other than perineal operations.

7. *Anatomical differences.* Increased lumbar lordosis will increase the amount of gravitation with the table level. In this case one can reduce the dosage to limit the level of anesthesia. Putting the patient in the lithotomy position immediately after the spinal injection reduces the amount of the lumbar curve in some patients, and one may have to take steps to compensate for this change if his technique depends upon that curve for gravitation.

8. *Consistency in technique* is particularly important. Keep as many factors constant as possible. Check the anesthesia level until it has stabilized, remembering that this may be twenty to thirty minutes.

Conduct of Spinal Anesthesia

General consideration. Many patients object to spinal anesthesia. If this objection is very strong, it is seldom wise to try to persuade the patient to have that type. If the objection is that the patient does not want to be conscious during the operation, supplementary anesthesia can be used. Many times the patient has no good basis for this objection and is converted and satisfied afterwards. Many patients are poor mental subjects for this type of anesthesia.

Pre-anesthetic sedation should consist of a good analgesic drug such as morphine and a good psychic depressant such as a barbiturate or scopolomine.

It is a mistake to tell the patient that he will not feel a thing during the operation. Some do not, but many get some type of sensation. Try to maintain the patient's co-operation and good graces during the induction of the anesthesia. It is important to get his arms as comfortable as possible before the operation starts.

The anesthesia level should be checked three minutes after the injection of the anesthesia. Then one can estimate any need for change of position. It must be checked before the incision is made. For one's information it should be determined every five minutes until there has been no change for ten minutes. The level may change up to thirty minutes after injection, but usually does not change after ten to fifteen minutes.

Put yourself in the patient's place; if not too confident, he may be just awaiting some horrible pain, so the first thing he feels may be interpreted as pain. The sense of pressure or touch is sometimes retained after pain sensation is lost. Also, transfer of sensation can occur. Manipulation of viscera frequently causes referred pain in the chest. Generally, reassurance of the patient that it will be of short duration or that it is not his heart failing, will take care of the matter. Frequently, warning him ahead of time that he may have such a sensation is good insurance; he is then in a frame of mind to give proper interpretation to the discomfort rather than become frightened that something has gone wrong.

Everyone has a different method of caring for the whims of patients. I don't mind scratching their noses, but I do not like to give them water to drink only to get it back later as vomitus.

Factors influencing the safety of spinal anesthesia:

1. Choice of patient to whom it is given.
2. Skill and experience of administrator.
3. Care of the patient during the operation.

There is a very limited value of making a list of indications and contra-indications. The decision had best be made for the individual patient. However, the demand on the part of the surgeon is often so persistent that some limits have to be maintained. The three factors listed above work together. The better the second two are carried out, the wider the range that can be given to the first. Of prime consideration, of course, is the area of the body that must be anesthetized. Anesthesia to the zyphoid or nipple line is apt to produce much more circulatory disturbance than when limited to the perineum or one leg. For spinal anesthesia above the inguinal ligament, the following conditions are particularly apt to cause trouble:

1. Severe anemia, 50 per cent hemoglobin or less.
2. Severe loss of blood before spinal anesthesia that has not been replaced.
3. Shock, or a patient recently recovered from shock caused by hemorrhage or intra-abdominal pathologic condition.
4. Extremely high blood pressure, particularly in patients with a high diastolic pressure.
5. Patients with skin infection of the back.
6. Unstable or immature mental state.
7. Pneumothorax, hemothorax from trauma, or other acute causes of loss of large area of functioning lung tissue.

There are many other factors which one may consider as ruling out the use of spinal anesthesia. They are of local and personal importance, but may not all apply generally.

The general care of the patient during operation has been discussed, but of more importance is the watching and care of the circulation, and level of anesthesia. The spinal anesthesia may cause some drop in blood pressure, even though a vasopressor drug has been given. Also, if the operation is in the peritoneal cavity, the manipulation will add to the drop in pressure. Both causes usually have their maximum effect at the same time. Generally, the surgical manipulation is not prolonged, but if so, it may need to be delayed to allow recovery of the pressure. The use of solution such as 5 per cent glucose to help prevent blood pressure drop is very helpful, that is, if they are started before or immediately after the spinal injection. They may not be effective in restoring the pressure once it has dropped. Blood or plasma is more efficient. If vasopressor drugs are to be used after the pressure is low, they should be given intravenously in small doses. If there has been considerable blood loss during the operation, the drop may well be due to this, and blood should be given and the vasopressor drugs used with care or not at all.

The first question arises at what pressure level must treatment be instigated? This is a biological problem, and there is no value that can be set for all patients. We start the prophylactic treatment before the spinal is given, then determine by the patient's condition what is indicated. Partial respiratory paralysis can usually be treated by administering oxygen. More extensive respiratory paralysis must be treated promptly by inflating the patient's lungs with oxygen. This can be done adequately with intermittent manual pressure on the breathing bag of an anesthetic machine.

Signs and symptoms of physiological disturbance from low blood pressure:

1. Nausea (may also be a reflex with good blood pressure).
2. Pallor.
3. Sweating.
4. Dizziness, stupor, unconsciousness.

Treatment aimed at immediate trouble and to overcome circulatory depression:

1. O_2 inhalations—inflation if there is respiratory paralysis or arrest from an anoxic respiratory center.
2. Intravenous fluids and blood.
3. Vasopressor drugs.
4. Sometimes head can be lowered.
5. Depression must not progress too far before treatment is started. Too often one hears the statement that anyone can watch the patient that has spinal anesthesia. The changes generally occur gradually, and by close observation treatment can be instigated in time to prevent serious consequences. This the anesthesiologist can do without troubling the surgeon, who may already have problems of his own and should not be distrubed to take care of the anesthesia also.

The most feared part of having spinal anesthesia by the patient is that the anesthesia will not last long enough. The anesthetist has this in mind before he starts, but in case he has misjudged the time, he must be prepared to administer promptly anesthesia of some type before the patient has severe pain. It is important that the patient is satisfied.

Supplementation may be necessary in upper abdominal surgery because of pain and discomfort caused by traction on the viscera. Remember how helpless a patient must feel, half paralyzed, and the other half strapped to the table, if you refuse to do anything when he says he is having pain. Any surgeon or anesthetist who must have an operation below the diaphragm should have spinal anesthesia, particularly those who make such outstanding claims for this method to their patients.

Summary

Spinal anesthesia requires as much skill and experience to administer properly as any other type of anesthesia. The care of the patient after the initial injection is just as important as during general anesthesia for the greatest safety and success of the method. Only the anesthesiologist has enough training and experience to use all the drugs and methods of this type of anesthesia. Others had best stick to one or two drugs that they have learned to use safely. Marked abnormalities in any of the three systems, respiration, circulation or central nervous system, usually make the use of this type of anesthesia inadvisable.

The length of the spine and the cerebrospinal fluid volume are more important in determining the dosage than the body weight. The rapid ascent of anesthesia level is more apt to produce a marked drop in blood pressure than producing the same level over a longer time. The circulatory depression is not caused by a specific drug but is related to the total area of the body anesthetized, plus the time over which this anesthesia is produced. In controlling the level of anesthesia, the gravitation factor is much more important than diffusion.

The safety and success of spinal anesthesia, as in all other types of anesthesia, depends upon the skill and experience of the administrator. Also, like other types of anesthesia, administration includes constant caring for the patient throughout the operation.

The Cerebral Palsy Problem

By Charles H. Frantz, M.D.
Grand Rapids, Michigan

Until comparatively recent years, spastic paralysis was considered a condition affecting chiefly the feeble-minded child. The designation "spastic" was more or less a general term under which other allied disorders were conveniently classified. There has been, of late, a gradually increasing interest in this type of affliction. Business men's clubs, benevolent groups and parent organizations are manifesting a desire to see the "spastic" child receive his due consideration.

Through the channels of educational programs, surveys and research, more light has been shed upon these children with neuromuscular disorders. The layman is becoming familiar with, and is appreciating more, the problems besetting this type of affliction. Our increasing familiarity with these cases has shown us that the true spastic comprises less than one-half of the total cerebral palsies in children.

Under the term infantile cerebral palsies we must classify spasticity (40 per cent), athetosis (40 per cent), and ataxias (20 per cent).

Statistical surveys have shown that cerebral palsy is almost as frequent as anterior poliomyelitis. Of great importance is the birth rate and incidence. There are seven of these children born per 100,000 population per year. Of this group of seven children, one will die before reaching the age of six years, and two will be feeble-minded, leaving four treatable cases. Thus, a community of 100,000 people will have between 50 and 60 of these children under 16 years of age. Some, of course, will be mild and others severe. The statistics in general show 27 per cent to be severe, 44 per cent moderate, and 28 per cent mild.

In urban areas where the public school system offers a special room or division for handicapped children, the mild case and some moderately involved will obtain special care and training during the school years. However, the severe type of case and the majority of the moderately involved, in both urban and rural areas, have no recourse to either schooling or treatment. At the present time there are inadequate facilities to handle cerebral palsied children.

The prevalence of this group among crippled children is demonstrated by the figures from the Orthopaedic Clinic at Blodgett Memorial Hospital in Grand Rapids. From January, 1935, to January 1, 1945, 130 new cases were examined. The distribution and ages were recorded as follows:

Age at admission	Pre-school	(1 to 5 years)	68	52.3%
	School age	(6 to 18 years)	57	43.8%
	High school	(over 18 years)	5	3.9%
Distribution in 23 counties	Rural		60	46.1%
	Urban		70	53.9%

The rate of admission per year was fairly constant:

1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
15	13	13	20	18	17	10	8	10	10

An attempt at a fluid analysis of schooling over a ten-year period was attempted and produced the following:

	Schooling	
Feeble-minded	20*	
In Public School	26	15.3%
Began in Public School	18	
Began in Ortho. School	8	
Have had, or having, Ortho. School	51	
Have had advantage, Convalescent Home	25	

In ten years, seventy-five patients have had advantage of schooling.

*Of these, nine were in institutions.

Up to January, 1946, only seven of these patients had been discharged from further care. A total of thirty-two cases have been lost to the unknown file, having failed to return in a five-year period.

The constant rate of cerebral palsy in the handicapped section of the public school system in Grand Rapids is revealed by the graph (Fig. 1). Of the total enrollment, infantile cerebral palsy has accounted for between 11.1 per cent and 19.6 per cent over an eleven-year period. It is interesting to note that contrary to the constant rate of this group of neuromuscular disorders, the incidence of infectious diseases of bone steadily decreases. The advent of chemotherapy has had much to do with the slow decline of those crippling diseases due to infection. The crippled children problem is constantly changing. We see less and less bone and joint tuberculosis. The incidence of rickets is decreasing. Although the incidence of anterior poliomyelitis continues about the same as in past years, this disease may in the future follow the other diseases of an infectious nature in a decline. Our gradually increasing knowledge of the virus makes us hopeful.

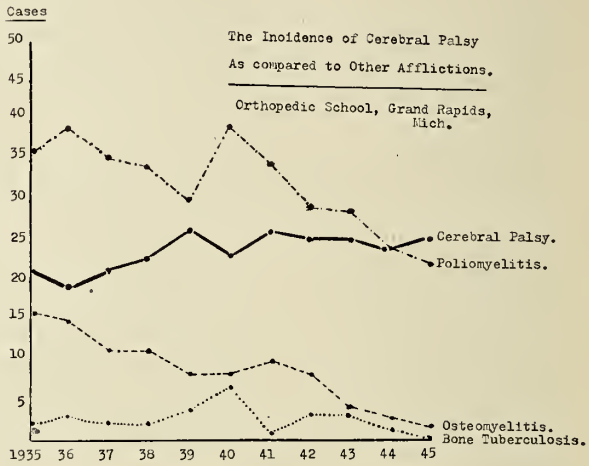


Fig. 1

The recently manifested interest in cerebral palsy occurring almost coincidentally with the decline of infectious diseases may well infer that this group will take its place alongside residual poliomyelitis, polyarthritis, cardiacs, traumatic lesions, and anomalies as far as care and rehabilitation are concerned.

A mild hemiplegic may well hold his own in the classroom with normal children. So probably may a mono-athetoid. These mild and borderline moderate cases are acceptable in the handicapped rooms of the public school. The severe and moderate, however, who by virtue of their motor dysfunctions are not acceptable in the system, are candidates for a special training program.

Most of us are born with a normal neuromuscular mechanism, a "high school physical education." We do not have to be taught a course in basic physical co-ordination. Contrarily, none of us are born with a high school mental education and think nothing of spending twelve years on our mental education; many of us devote considerably more. We might, however, balk at having to spend twelve years or more on our physical education along with mental development. The cerebral palsied individual is not born with a high school physical education and should be willing to spend a long time on it. We know that individuals do not learn skills ahead of the years they normally develop. There is no rushing or shortening the period necessary to develop the basic skills in normal

individuals; neither, then, should such be expected in the development of the spastic or athetoid child.

The mental status of these children should be determined as accurately as possible. Probably one-quarter of them are borderline or feeble-minded. We expect mental deficiency to be more prevalent in spastics as the lesions are cortical. It is sometimes difficult to distinguish actual mental impairment from retardation which is the result of the handicap (limited experience for the given age). The Stanford-Binet test may be given. If it is low, one should endeavor to determine why it is low. One evaluation is unsatisfactory and unfair in the more moderately and severely involved. Subjecting a child to an examination based on motor response and time elements is taxing. The child should be given the benefit of the doubt.

Some 15 per cent have hearing defects, and although acuteness of hearing may be normal, pitch cut-off occurs. Below certain levels, all vowels sound alike. It may be impossible for the child to catch the difference between "T's" and "S's." Difficulty with diaphragm, larynx and tongue may be present. An examiner not acquainted with the nature of these handicaps might classify the child as mentally lowgrade; whereas, the responses of a fairly quick brain may be laboring to form painfully slow and difficult words.

Visual handicaps may be present despite 20/20 acuity. Convergence may be impossible and a child may not be able to move the eyes from side to side or up and down in a co-ordinated fashion. Reading across a page or adding a column of figures would be very slow or even a failure. Some ataxics become dizzy attempting to read.

In the presence of some of these handicaps of the motor system, rendering routine intelligence quotient estimation unsatisfactory, an observation or probationary period of three months will tell much. The "learnability" of the child can be evaluated, and one will determine whether or not the candidate is capable of schooling.

Individuals working with cerebral palsy for any length of time have come to realize that these children are a "different kind of person." Their problem is one of vocational guidance and personality development as well as correction of deformities, braces, and physiotherapeutics. Each day's work includes the combating of introversion and antisocial tendencies. It is realized by the physiotherapist and occupational therapist, by the teacher in charge of mental development, and by the specialists in sight and speech, that all concerned must have an understanding of the nature of the affliction and its bizarre manifestations.

At the present time the management of cerebral palsy seems to have fallen to the orthopedist. This is probably due to the fact that locomotion and the function of the upper extremities are impaired. In spastics, contractures occur and peripheral surgery may be indicated. Also, braces and multiple corrective devices are employed, such apparatus being a part of the orthopedist's field of endeavor. Few doctors go further than supervise braces, correct deformities, and consult at regular intervals. Despite the fact that these activities and procedures go only part way in answering the over-all problem, if the orthopedist or any other physician or surgeon were to confine himself to cerebral palsy with all its demands, he would soon become a specialist within a specialty and not be a neurologist, pediatrician, psychiatrist, or orthopedist. Up to the present time, very few doctors have manifested the desire or interest to confine themselves to this single group of afflictions. In all probability very few ever will do so. The cerebral palsied child, even though he is a special entity, presents motor, sensory and emotional problems in a number of specialties and is, therefore, not the charge of any one professional individual if his rehabilitation is to be successful.

The long road of training and conditioning is the responsibility of a professional team. With the present organization of clinics throughout the state, it should not be difficult to designate the social service worker, the pediatrician, neurologist, psychologist, and orthopedist to examine and evaluate a child for rehabilitation and schooling. This phase, as a matter of fact, may be said to be existent. However, the moderate and severe cases after evaluation have no place to obtain their due. We do not have sufficient institutions to handle them properly.

It would be unwise to place these children in general convalescent homes or hospital schools with other types of crippled children. Specially designated centers properly equipped with the necessary apparatus and qualified personnel would do much to improve the lot of spastic, athetoid and ataxic children. One accepts without a second thought the presence of institutions for epilepsy, the blind, and mentally deficient.

Centers for the rehabilitation of cerebral palsy should not be homes or institutions for unlimited

care. A definite goal should be sought for every case admitted. Turnover of cases should be mandatory and no custodial case should be admitted because the space is available. A two- or three-year maximum program divided into school semesters would offer training along with schooling. Summer sessions for the less severe cases might be offered to aid them further when they return to orthopedic schools for the fiscal terms.

Obviously, the mentally deficient should not be candidates. Neither should progressive types of involvement such as certain forms of encephalitis, severe dystonia musculorum deformans, et cetera. A screen clinic diagnosing and evaluating a child would insure proper selection of children.

The goal of a treatment center should not necessarily be to turn out normal individuals. This would be impossible. It is, however, perfectly logical to endeavor to bring a helpless person to the level of a self-help by training of the hands and arms, to develop speech, and to free him as much as possible from the care of another. Many wheelchair-bound individuals do fairly well in this world. It should be possible with the proper selection of candidates to pass them initially through an environment as perfectly adapted to them as possible, followed by successive stages of progress towards a normal environment, ending the program with those children better able to cope with the world.

A program based on common sense and not striving to accomplish the impossible will ask of itself before embarking with the child: What will be accomplished in the long run? How will this child be better? In what way will he be better? Well-trained personnel acquainted with the multiple aspects of cerebral palsy will not fuss with the hopeless aspects; they will endeavor to co-ordinate the child, develop basic skills, improve speech and locomotion, endeavoring to bring a badly handicapped individual to the level of self-help in dressing, eating, talking, and toilet.

It behooves those of us in the profession who are interested in, or who come in contact with this group of children, to analyze the problems and be able to answer the multitude of questions that may be directed our way. The organizations manifesting interest should be guided and directed towards a unified program with a definite goal. They should be made familiar with the already existing facilities and not go uninformed along their own

(Continued on Page 1546)

Adhesive Strapping For Low Back Pain

By Howard J. Schaubel, M.D.
Grand Rapids, Michigan

THE PURPOSE OF this paper is to describe an adhesive support supplemented with tongue blade splints, for the treatment of low back pain and low back injuries which require temporary immobilization.

Much has been written concerning low back pain and its surgical treatment. However, before surgery is carried out in any of the pathologic conditions amenable to operation, it is often well to immobilize the low back in an attempt to prognosticate the long range postoperative result. The usual corset is sometimes not readily attainable; in such cases, other means of immobilization are used until the canvas support can be fitted. There are many painful low backs that show nothing abnormal by x-ray; some of these are acute, others are chronic in nature. A temporary low back support, together with manipulation and procaine infiltration of a trigger spot, will often relieve the pain and discomfort as well as reduce the concomitant spasm of the paravertebral muscles. It is this latter category especially that requires a firm

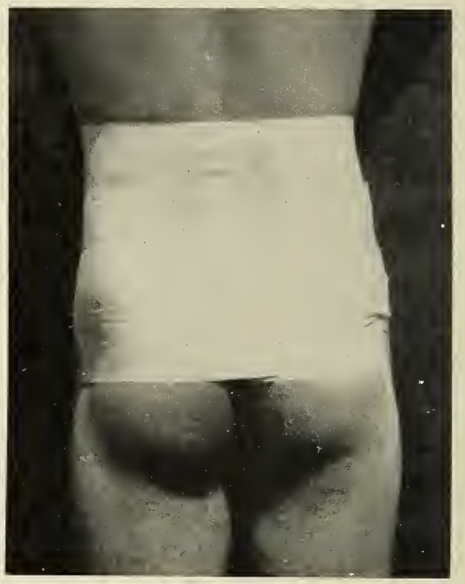


Fig. 1. Back strapped. Two tongue blades incorporated in the tape.

adhesive strapping, together with the usual conservative regime of physical therapy and a hard bed.

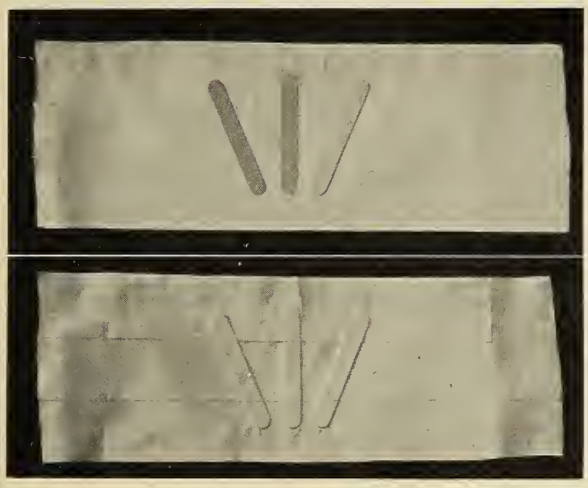


Fig. 2. (*above*) Three 4-inch width, adhesive strips, adherent side up, with tongue blades stuck to the center.

Fig. 3. (*below*) Tongue blades held firmly by three additional tapes, adherent side down. Three inches of exposed adherent tape are left at either end to allow fixation to each side of the initial strapping of Fig. 1.

Method

The lumbosacral region is painted with compound tincture of benzoin or one of the proprietory adherents. The lumbosacral area is then strapped in the usual manner with the patient either standing erect or lying prone. A moderate amount of skin tension should be obtained, and 3- or 4-inch width, adhesive strapping should be used. If firm support is needed, two or more tongue blades can be strapped into the tape as shown in figure one. It is the practice of the author to use an abundant amount of adhesive for this preliminary strapping; the area of pain plus 5 inches above and below should be strapped. Three 4-inch widths of adhesive strapping are then cut long enough to reach around the front of the body and overlap both sides of the back strapping by 3 inches. One of these strips is then laid on a flat table, adhesive side up; the next strip is then set parallel with the first, adherent side up and overlapping the first strip about ½ inch. The third strip is laid similarly to become adherent to the second. Three tongue blades are then stuck to the center of the composite tape, as illustrated in Fig. 2. Three more strips of 4-inch adhesive are next fitted, adherent side down, over the tongue blades, as illustrated in Fig. 3. The latter strips are about 6 inches shorter than the initial strips, allowing 3 inches of adherent tape still exposed on each side. The patient is then requested to roll over on his back or face the physician, depending on whether he is standing up or lying down. (Small felt pads are placed over the anterior superior iliac spines if the patient is very thin.) As the patient pulls in his abdomen while taking a deep breath, one end of the tape strip reinforced with tongue blades is applied to an anterior tab of the back strapping on one side, pulled firmly around the abdomen as in Fig. 4, and stuck to the anterior tab on the other side. The patient then assumes normal posture. Two or three anchoring strips of tape can then be applied over the region where the anterior and posterior tapes join. This allows a firm support to the back, relatively comfortable to the patient (Fig. 5). If the support becomes loose in a few days, it can be tightened by removing the anchoring strips, loosening one side of the anterior band, and with the patient again pulling in his abdomen, the anterior band can be replaced farther back and again anchored.

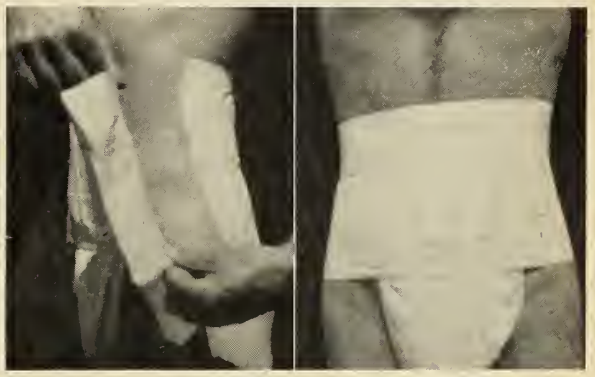


Fig. 4. (*left*) Composite anterior strip fastened to the right side of body, pulled firmly around the abdomen, and about to be anchored on the left anterior section of the back strapping.

Fig. 5. (*right*) Anterior view of the completed strapping.

MSMS

CARCINOMA OF THE RECTUM

(Continued from Page 1478)

of malignant lesions and having proved its worth in results obtained through the years.

It is obvious that there should not be only one method for the proper surgical treatment of lesions in these regions. There should be many and there are many. It is imperative for the surgeon to be familiar with all of them in order that the selection may be individualized for the patient.

Editorial

NATIONAL HEALTH LEGISLATION DEMANDS

DEMANDS ARE MORE forceful than ever that some sort of national health legislation be enacted within the near future. It has been announced in the press* that Michigan is to be a trial field for little Wagner-Murray-Dingell Bills. One was introduced just before the last legislature adjourned, and this time it will be coming forth earlier to have a chance to be considered. Two years ago such a bill barely missed passage in California.

We have read this past few months of the hearings being held in the Committee on Labor and Education of the United States Senate, with carefully selected witnesses and garbled reports seeming to show a mass of evidence for the bills. That same technique can be invoked again. Those opposed to the bill were limited in numbers, but apparently anyone in favor got a hearing even if he represented a rather small group.

Major General Paul R. Hawley, medical director of the Veterans Administration, in an address to students of George Washington Medical School said:

> "It is a fact that can no longer be denied nor evaded that medical care has become so expensive as to place it in the class of luxuries . . .
>
> "I am amazed to find how few (physicians) realize just how close we are to some form of socializing of medicine. They have been drugged into believing that bills before the Congress are merely the ideas of crackpots which have no chance of ever becoming law. Nothing could be farther from the truth. Just as sure as we are here together today, if medicine does not offer a workable solution to this real problem, some plan will be forced upon the medical profession." (General Hawley suggests socializing of diagnostic and laboratory services, the most expensive item in medical care, and adoption of more businesslike methods.) "The lowering of costs of medical care need not be made at the expense of the profession. But lower them we must, else we are all going to be working for the government within a very short period."

Senator Taft, in a speech before the Wayne County Medical Society (see page 1418), said the profession must offer something that will fill the requirements of those who wish national health legislation, and that does not include the social workers, the do-gooders, or the bureaucrats who wish to remain secure in well paid jobs. What it does mean is that there is an ever-increasing mass of the whole people who are clammering for medical and health "security." They want to have their health bills guaranteed in advance, and most of them at present want that at the expense of someone else—the government or their employer, and the doctor.

The United Mine Workers Union secured a health fund as a part of their strike settlement. Other unions are now at their conventions discussing the subject and determining that such a fund will necessarily be part of their future terms, and will not be considered as an increase in wages. The AMA in convention at San Francisco adopted a resolution instructing their councils and committees to offer aid and advice to the labor unions in working out the details of their new plans for health funds.

Time, October 14, 1946, page 51.

RUGGED INDIVIDUALS

ALL OF THESE INCREASING plans for taking cognizance of the national health are in a measure a retrograde movement in the life of this great republic. When we were growing from spindling beginnings to the estate of a great nation, we did it by the combined efforts of men and women who took care of themselves. The only odds they asked of anyone was that they be given a chance to work and grow and build. When a new want came into their lives and they had to provide it, they either invented and built it or worked much harder and bought it.

But the modern trend seems to be entirely away from this self-sufficiency. It seems to be the natural thing now to look for someone to supply our needs without too much effort on our own part. So far as medical politics and medical or health legislation is concerned, that attitude is just what the long-haired enthusiasts, the do-gooders want. If we can be lulled into thinking all is well, they can more easily carry out their plans, and when we are finally aroused or awakened, we shall wonder what has happened, and why George did not tell us what was going on.

These individuals are not sleeping while we are letting affairs take their own course. They see in our indifference and the public's need, a chance to increase their power. Many of them are already entrenched in well-paying positions with the government and in places of untold power over the well-being of the masses. The power to dole out health services, and other social security benefits is the power to control the lives of all the people. It leads in very short steps to national socialism. It has done that in other places. Food, clothing and housing are also necessary to the health of the people, and they must necessarily be guaranteed to the masses, too, when their individualism has been sapped some more.

THE EIGHTY-FIRST ANNUAL SESSION

THE EIGHTY-FIRST ANNUAL session of the Michigan State Medical Society is history. It saw the largest registration in our history. The total registration was 2,833, of which 2,165 were doctors of medicine. The halls of the hotel, the exhibits and the convention rooms were crowded. Only one of the speakers failed to appear, and he was confined to his bed but sent his paper on.

As ever the exhibits were well arranged, displayed to advantage, and were visited by the interested members. Several of the exhibitors told the writer how much they liked to come to the Michigan meeting. They consider it as important as many national conventions.

The work of the Society is being checked and directed by the House of Delegates, and important decisions are being carefully studied before being passed. Recognizing the importance of public relations, the Society adopted a far-reaching and extensive program, involving another assessment of $25 on each member to be paid as part of their dues.

The General Assembly, at the time of the president's night, heard an inspiring speech by Mr. C. F. Kettering, vice president of General Motors. This was the annual Biddle Oration.

ELECTIONS

President-elect P. L. Ledwidge, M.D.

DOCTOR LEDWIDGE HAS BEEN advanced to the presidency of the Michigan State Medical Society as the result of untiring devotion, days upon days of time, and constant effort to give to the society the very best administrative ability that can be given. Dr. Ledwidge graduated from Wayne University College of Medicine in 1920, interned at Harper Hospital one year, was resident in Children's Hospital three months, then at Harper Hospital for a year. He has been in the private practice of internal medicine since 1922. His first three years were in association with the late E. W. Haass, M.D., chief of the department of medicine at Harper Hospital.

Dr. Ledwidge has been Fellow of the American College of Physicians since 1926, and acting governor for Michigan, 1942-45. He has been a Diplomate of the American Board of Internal Medicine since 1937. He is assistant professor of clinical medicine at Wayne University College of Medicine, attending physician to Harper Hospital, associate physician to Mount Carmel Mercy Hospital, member and past president of the Detroit Medical Club, and member of the Detroit Academy of Medicine.

Dr. Ledwidge is secretary of the Board of Directors of Michigan Medical Service, and has been speaker of the House of Delegates of the Michigan State Medical Society for the past five years. As such he has been a member of the Council of the Michigan State Medical Society, and of the Executive Committee. In these offices of the Medical Service and of the State Medical Society, his services have always been freely given and his counsel and advice have been invaluable. We are proud to have him as our president-elect.

Councilors

1st District. C. E. Umphrey, M.D., Detroit, was re-elected.

4th District. R. J. Hubbell, M.D., Kalamazoo, was re-elected.

5th District. J. Duane Miller, M.D., appointed to fill the vacancy caused by the resignation of A. B. Smith, M.D., Grand Rapids, was elected.

J. Duane Miller, M.D., was graduated from the University of Michigan in 1924, with B. S. and M.D. degrees. He was a teaching assistant from 1921 to 1924. He interned at Blodgett Memorial Hospital, Grand Rapids, for a year, after which he practiced with Dr. Alexander M. Campbell until 1939. He attended the University of Vienna 1930-31. He was on active duty in the U.S. Navy during World War II, at the U.S. Naval Hospital, Mare Island, California, in 1942; at the U.S. Naval Base, Solomon Islands, in 1943; with the amphibious forces during the assault on Peleliu Islands in 1944;

and at the U.S. Naval Hospital at Corvallis, Oregon, in charge of bone and joint surgery in 1945. He was released to inactive duty in February, 1946, with the rank of commander.

Dr. Miller has been secretary and chairman of the Section on Obstetrics and Gynecology of the Michigan State Medical Society, chairman of the Press Relations Committee of the MSMS, chairman of the Radio Committee, chairman of the Committee on Industrial Health, 1941-42, and secretary of the Michigan Association of Industrial Physicians and Surgeons for many years. He is consultant in surgery and chairman of the department of surgery of Blodgett Memorial Hospital, and president-elect of the Michigan Association of Industrial Physicians and Surgeons.

6th District. R. C. Pochert, M.D., Owosso, was re-elected.

Speaker of the House of Delegates

John S. DeTar, M.D., Milan.

Dr. DeTar received his literary degree from the University of Michigan in 1924. He graduated from Wayne University, M.D., in 1930, and interned at Henry Ford Hospital. He has practiced in Milan, Washtenaw County since 1931 to the present time. He was president of the Washtenaw County Medical Society 1940-41. He has been chairman of the Public Relations Committee of the Michigan State Medical Society, 1943-44, and 1945 to date. He served as vice speaker of the House of Delegates, 1944-45. In civil life Dr. DeTar is president of the Library Board, president of the Community Council and chairman of the Washtenaw County Citizens Committee for a County Health Department.

Vice Speaker

R. H. Baker, M.D., Pontiac, a former member of the Council of the Michigan State Medical Society.

WE HAVE A PLAN

WE HAVE SAID THAT before and are repeating it. The Taft Health Bill meets the wishes of those of us who would like to give to the public all the national health program that they can reasonably want, and all that they should be willing even to accept. The Taft Health Bill does several very definite things: 1. It provides a health department in the government, with a doctor of medicine in the President's Cabinet, and assigns to that department all the health function bureaus and departments of the government. 2. It provides for five years' general medical research, by grants-in-aid. 3. It provides general medical service for families of low income. This is done at the state level where it should be, and does not institute any new means test. There will be Federal aid but state administration. The bill recognizes the voluntary non-profit and other funds rendering health service to those who wish to provide for themselves on a prepaid basis, and provides that the states may use such voluntary or non-profit plans to furnish health services to these low income families by paying in whole or part for the premiums. 4. It provides for dental health services for school children and families and individuals of low income, again on the state level. 5. Further research is provided: dental research, neurosychiatric research, new construction for research.

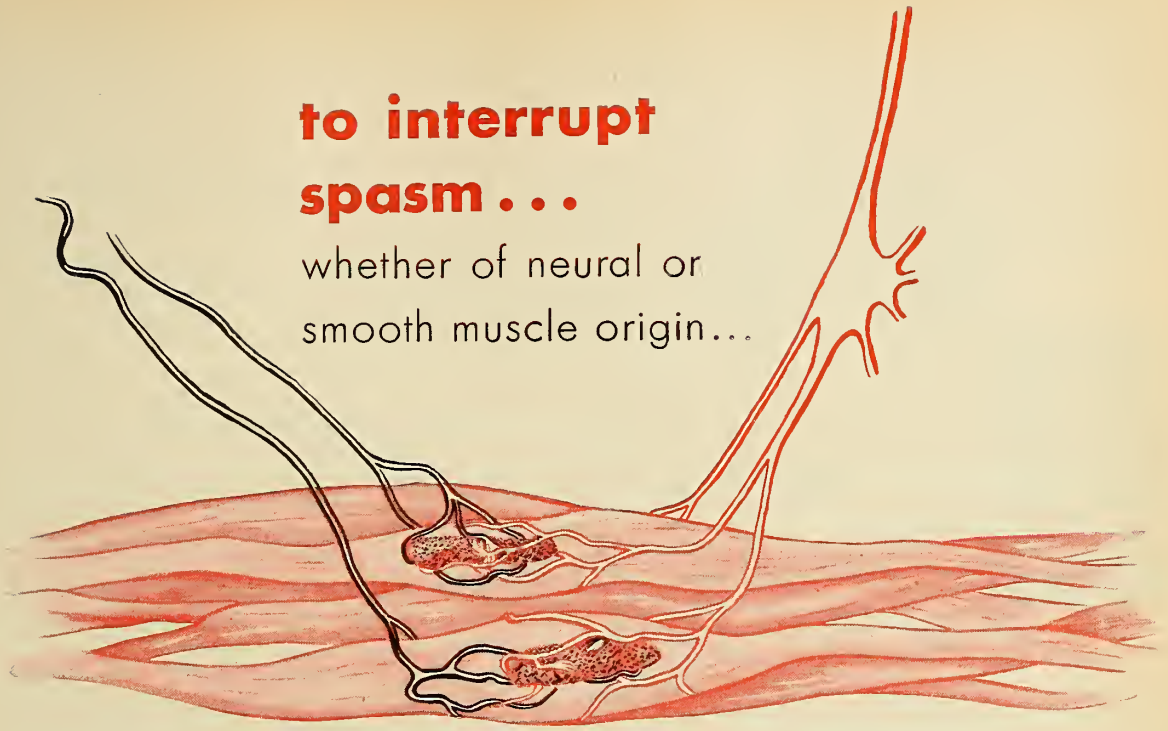
This bill is notable in that it does not provide for the Federal or other government to enter into the relation between the patient and his doctor. The present relation is not disturbed. Provision is even made for the doctor to be paid for state wards the same as he is for other patients who have had the forethought to purchase their services as prepaid services. This makes the state ward a private-pay patient the same as any other. His health services will, if the state chooses, be a part of the increasing numbers now being cared for by voluntary plans.

Another interesting feature in the bill is a provision allowing any branch of the Federal government to make payroll deductions for those employes who so wish. That is not now possible.

The Taft Health Bill is in process of improvement, and suggestions from the practitioners who will live under its provisions are in order. Mr. Taft and his associates wish to pass the very best bill it is possible to produce. When it is done it will represent the combine efforts of the committees of the organized medical profession.

PRIVATE PRACTICE—BRITISH NEW UNIVERSAL HEALTH MEASURE

The right of private practice is conceded but the Minister will control the use of private wards in hospitals and have powers to acquire compulsorily any private nursing institution, and in these and other ways may lessen or remove the facilities for private practice.—*British Medical Journal,* October 19, 1946.



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whether of neural or smooth muscle origin . . .

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RESEARCH IN THE SERVICE OF MEDICINE

Woman's Auxiliary

SERENITY, COURAGE, WISDOM

In accepting this office, I am fully aware of the responsibilities it brings, but of this I have no fear, knowing that by my side are 1,200 of the most intelligent and humanitarian-minded women in the State of Michigan. I feel a responsibility not only to my organization but, to an even greater degree, to the Michigan State Medical Society, to which we are an auxiliary. Our name implies an assistant, or one who gives aid. If we are to act as an assistant it is of utmost importance to understand the purpose and problems of our parent organization. Dr. Harrison H. Shoulders, president of the AMA, in speaking to the Women's Auxiliary in San Francisco, closed his address with this thought: Our purpose is the health, welfare, and progress of the American people under freedom.



Mrs. Retla Alter

Let us first consider the health of our nation. There are those who seem unaware of the progress of medical science in the past years. There is no country in the world which has equalled our own in effective control of typhoid, diphtheria, smallpox, leprosy, and tuberculosis. Life expectancy in 150 years has increased from thirty-five to sixty-two years. Yet, the statistics of physical rejections for military service, released by Selective Service, have been quoted as a criticism of efficiency of medical care in this country. However, in spite of higher physical standards for military service demanded of the youth of this country, there was a lower percentage of rejections than any other country participating in World War II. Let your community know that the medical profession is proud of the consistent progress made through the years, in the development of the healthiest nation of the world. We should feel proud to act as an auxiliary to a profession which has attained such superlative success. Let your community know that we are organized for the purpose of improving the health and welfare of our people. Lend your support to such movements as Cancer Control, TB Radio Project, Rheumatic Fever Control, and denounce the socialistic programs depriving the people of voluntary health care. Great things have been accomplished but far greater tasks lie before us. Their accomplishment depends on the wisdom of the profession and the intelligence and co-operation of the people, and it remains for all of us, who have the welfare of the race at heart, to plan wisely and carry forward courageously the campaign against ignorance and disease.

Next may we consider welfare. The concept of public welfare has greatly changed in the past few years. There is not a law on our statute books that does not end with the expression "the public welfare requiring it." Welfare, to vast numbers of our people, means a monthly check from some government agency. As Dr. Shoulders stated, our leaders in human charity seem to be those who give that which they get from somewhere else, whereas welfare, as we pursue the thought, is freedom. Since VE Day, 20,000 have been added to the government payroll. When the percentage of government employes becomes large enough, our freedom will be gone. The government employes become regimented into a political unit where they seem to grow and expand, and each one has a propaganda department, financed by the taxpayer.

Now as to some of the problems. Dr. Roger I. Lee, past president of the AMA, noted that the greatest change of the war years had been brought about in the relationship of our government to ourselves. We have seen and will see the government take an increasing interest in our affairs, both personal and professional. There has recently been some very good legislation passed, in the Hill-Burton Hospital bill and the Science Foundation bill, but we must not depend entirely upon the government to build our hospitals and direct our research, or the government will soon take over the practice of medicine. We have given up many liberties gladly during the war years but we should make it our responsibility to see that those liberties are returned to the American people. Over 600 years ago the people were fighting for their right to liberty as brought out in the declaration of the Scottish Parliament: "It is not for riches, glory or honor that we fight, but we fight for that liberty which no good man loses but with his life."

If we are to give aid to the medical society it is necessary that we be informed about the plans and actions of their organization, and that we get this information from the proper source. The national and state medical journals, the national bulletin of the Auxiliary, and *Hygeia,* will provide you with authentic material. I was recently much impressed with the effect some of the articles have on the layman. Shortly after the article on "Cold Wave" appeared in the *AMA Journal* I walked into the beauty parlor to face an enormous sign reading "More doctors' wives get cold waves than any other permanent." It was an article that stimulated much comment, and it behooves us to know the opinion expressed in our official publications. The public today is eager for reading matter on subjects pertaining to medicine but the lamentable fact is that so many unauthorized articles appear in the press. As Auxiliary members you should be informed and then in casual conversation, over the bridge table, over the back fence, or over the grocerman's counter, you may clarify many erroneous ideas. We have begun to realize that an unplanned speech bringing out a statement of

(Continued on Page 1500)

Inaugural Address of the president, Woman's Auxiliary to the Michigan State Medical Society, delivered at Statler Hotel, Detroit, September 25, 1946.

PALATABILITY AND NUTRITION FACTORS of Campbell's STRAINED BABY SOUPS



Q. What is the importance of palatability?

A. A leading pediatrician has pointed out that even in the early months of life infants are able to detect minute differences in flavor. The appealing palatability of Campbell's Strained Baby Soups is, therefore, an advantage. It should further be pointed out that all the "tastes" in these soups are the wholly natural ones of the meats, vegetables and cereals used.

Q. Why are the different ingredients selected?

A. Campbell's Strained Baby Soups are planned to provide a balance in nutrients to supplement the daily milk diet. Since it takes many different foods to supply the approximately 40 nutrients needed for infant development and energy, we use vegetables and a cereal in preparing each of the four meat soups. Flavor is improved, too. For instance, liver alone has too strong a taste for some babies, but blended with vegetables, palatability is enhanced. It should also be noted that these soups are intended for use as early in normal infancy as any other strained baby foods.

Q. What measures are taken to conserve food constituents?

A. In preparing these Baby Soups, Campbell's have developed a method, based on the latest scientific knowledge, which retains the minerals and efficiently conserves the vitamins.

A comprehensive analysis of each soup may be had upon request to Campbell Soup Company, Camden, New Jersey.

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(Continued from Page 1498)

facts in a general conversation can have an immeasurable effect on the thinking of the American public. Plan at your regular meetings to have short reviews of some of the interesting articles appearing in the medical journals. If they are interesting to you, they will be interesting to your lay friends and acquaintances.

Whether it be reading, writing, arthrimetic or life, there are certain basic fundamentals we must recognize. These past war years still cast a shadow across our lives. So astronomical have been the figures involved in this war, we have forgotten how to count by ones and twos. So strange the machines and methods of destruction, we hold a false idea that the hope of the world lies in things still to spring from the ingenious mind of the scientist. The atom bomb was a marvelous scientific discovery but has it actually solved any of our problems? The fighting is over, the problems are still with us. The world is getting smaller and smaller, but the gulf between the peoples seems ever to widen. If our scientists could discover and develop an atom that would make all people strive toward a common goal, then civilization could attain lasting progress. But we are slowly realizing that the solution of today's problems must evolve from everyday living, and we, the women, must be the thread that carries the past into the future. We must be the fibres of which the morale of the American people is made. Steadfastness and purpose lie in our hands, and just as we build up a financial deposit, we must build up a mental, moral, and spiritual deposit to draw on in time of need. May I leave this thought with you for the coming year: "God grant us the serenity to accept the things we cannot change; courage to change the things we can; wisdom to know the difference."

MRS. R. H. ALTER, *President*
Jackson, Michigan

SURGERY OF THE PANCREAS

(Continued from Page 1482)

6. If the diagnosis is established early and operation is performed before the liver suffers irreparable damage, chances of survival are good.

7. Successful radial pancreatoduodenectomy in a man seventy-eight years of age is reported.

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Say you saw it in the Journal of the Michigan State Medical Society



"Now Daddy's got to go to another 'birthday party,' Son..."



● Somewhere high in the sky the stork is racing. But the doctor will be at its destination first. Ready and waiting.

Whether bringing life or guarding it, the doctor's personal life fades into the background when duty calls. He is "on duty" every minute of every hour of the twenty-four.

But he isn't complaining. Or asking for any special credit. It's his job—and he does it.



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What's What

D. H. Kaump, M.D., Detroit, is the author of an original article "Laboratory Tests in Practice," which appeared in *JAMA* of October 5.

* * *

Mackinac Island needs a doctor to serve its people. There is a vacancy with a small monthly subsidy. Anyone who is interested should write Mayor Allan Sawyer.

* * *

The House of Delegates of the Colorado State Medical Society voted in September, 1946, to go into a strong public relations program, backed up by an increase in per capita dues to $50 per annum.

* * *

Carleton Dean, M.D., Lansing, addressed the Woman's Club of Ovid, Michigan, November 4, on "Rheumatic Fever Control." His address was illustrated with a motion picture.

* * *

E. H. Rowley Company announces the removal of its offices and factory to 11330 Woodward Avenue, Detroit. Mr. F. O. Peterson, president, cordially invites the members of the profession to visit the new and enlarged quarters.

* * *

Jean Paul Pratt, M.D., Detroit, has been appointed director of the scientific exhibits to be held in connection with the Third American Congress on Obstetrics and Gynecology, to be held in St. Louis, Missouri, September 8 to 12, 1947.

* * *

William R. Bond, M.D., Yonkers, New York, for the past eight years with the Medical Research Division of Schering Corporation, has been appointed lecturer in physiology and endocrinology at the Medical College of Virginia, Richmond.

* * *

L. J. Hirschman, M.D., of Detroit, presented a paper on "Some Common Proctological Conditions of Children" at the annual session of the South Carolina Medical Association. His is the leading paper of the *Journal of the South Carolina Medical Association* for October, 1946.

* * *

The third annual clinical conference of the Chicago Medical Society will be held at the Palmer House, Chicago on March 4, 5, 6 and 7, 1947. Prominent men in medicine from all sections of the United States will take part in the program.

* * *

"Doctor of Medicine" will be held at 12:45 p.m. each Friday henceforth. Broadcast over CKLW, this presentation of the Radio Committee of the Michigan State Medical Society is sponsored as a public service by the Hack Shoe Company. Speakers who have appeared include Joseph G. Molner, M.D., Ray S. Morrish, M.D., Ralph A. Johnson, M.D., A. E. Catherwood, M.D., and Andrew S. Brunk, M.D.

* * *

C. H. Peabody, M.D., Lake Odessa, was honored by members of the Barry and Ionia-Montcalm County Medical Societies at a joint meeting held in Lake Odessa on October 15. Doctor Peabody is retiring from active medical practice after forty-eight years of continuous practice. Doctor Peabody was presented with gifts from each of the societies. For the scientific portion of the program, M. M. Marrin, M.D., Grand Rapids, discussed the subject of "Burns."

* * *

"Doctor must pay $8,000 to mother. An $8,000 verdict was returned in Circuit Court against Dr. Manuel B. Goldberger, Saginaw osteopath. Dr. Goldberger was sued by Mrs. Lawrence Nichol of 2431 Thatcher. She alleged that Dr. Goldberger diagnosed the illness of her four-year-old son, Nathan, as measles instead of spinal meningitis, and that, as a result, Nathan was not given proper treatment and has lost his hearing."—*Detroit Free Press,* October 17, 1946.

* * *

L. Fernald Foster, M.D., Bay City, secretary, Michigan State Medical Society, and *A. H. Miller, M.D.*, Gladstone, medical co-ordinator, Michigan Crippled Children Commission, were guest speakers on the program of State Association of Social Welfare Boards and State Association of Boards of Supervisors, Sault Ste. Marie, September 17. Dr. Foster spoke on "Uniform Schedule for Governmental Agencies." Dr. Miller's subject was "The Work of the Crippled Children Commission for Afflicted and Crippled Children."

* * *

The National Gastro-enterological Association announces its annual Cash Prize Award Contest for 1947. One hundred dollars and a certificate of merit will be given for the best unpublished contribution on Gastroenterology or allied subjects. Contestants residing in the United States must be members of the American Medical Association. All entries for the 1947 prize should be limited to 5,000 words, be typewritten in English, prepared in manuscript form, submitted in five copies, accompanied by an entry letter, and must be received not

(Continued on Page 1506)

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1. Am. J. Surg. 44:288 (April) 1942.

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(Continued from Page 1504)

later than April 1, 1947. Entries and requests for further details should be addressed to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

* * *

The initiation of a nationwide program of public education and information on diseases of the heart was announced recently by officials of the American Heart Association. The program, according to Howard F. West, M.D., Los Angeles, president of the Association, will have as its prime purpose "the dissemination of educational information to the public in a broad effort to retard the rapid increase of heart disease throughout the nation." Among the directors of the American Heart Association is Frank N. Wilson, M.D., Ann Arbor.

* * *

A. S. Brunk, M.D., Detroit, past president of the Michigan State Medical Society, was guest speaker at the annual meeting of the Association of American Physicians and Surgeons, Chicago, November 7-8-9, 1946. The AAPS announcement re Dr. Brunk read as follows:

"Dr. Brunk is past president of the Conference of Presidents and Other Officers of State Medical Associations, and one of the nation's outstanding medical leaders."

Dr. Brunk spoke on "The Aims and Purposes of the Conference of State Presidents."

* * *

LeMoyne Snyder, M.D., Lansing has given up the practice of surgery and has opened new offices at 705 American State Bank Building, Lansing, for the practice of legal medicine exclusively. He has also formed an association with four prominent scientists for the investigation of legal matters involving scientific evidence. Dr. Snyder has practiced in Lansing for twenty years and is a past president of the Ingham County Medical Society. He graduated from Harvard Medical School in 1923, was admitted to the Bar in 1934, and is the author of the book, "Homicide Investigation."

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At the centennial session of the American Medical Association, to be held in Atlantic City, June 9 to 13, 1947, the scientific exhibit will include both the history of medicine during the past century and the latest developments of medical science.

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(Continued on Page 1510)

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(Continued from Page 1506)

mittee on Scientific Exhibit will make its decision and notify the applicants.

Application blanks for space should be procured as soon as possible. They are available from the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

* * *

The *Michigan Regional Fracture Committee* met at the Hurley Hospital, Flint, Michigan, Wednesday, November 20, 1946. A luncheon and business meeting preceded the scientific session at 1:30 p.m. The program was as follows:

Opening remarks, Henry Cook, M.D., Chief of Staff, Hurley Hospital

Introductory remarks: "Management of a Fracture Service in an Open Hospital" George J. Curry, M.D., Chief Division for Surgery of Trauma

"Basic Principles in Extremity Amputations" Harold W. Woughter, M.D.

"Management of Chest Trauma" Stephen M. Gelenger, M.D.

"Hip Dislocations" Hardie B. Elliott, M.D.

"Management of A Severely Burned Patient" T. S. Conover, M.D.

"Management of Ulnar Fractures" Don L. Bishop, M.D."

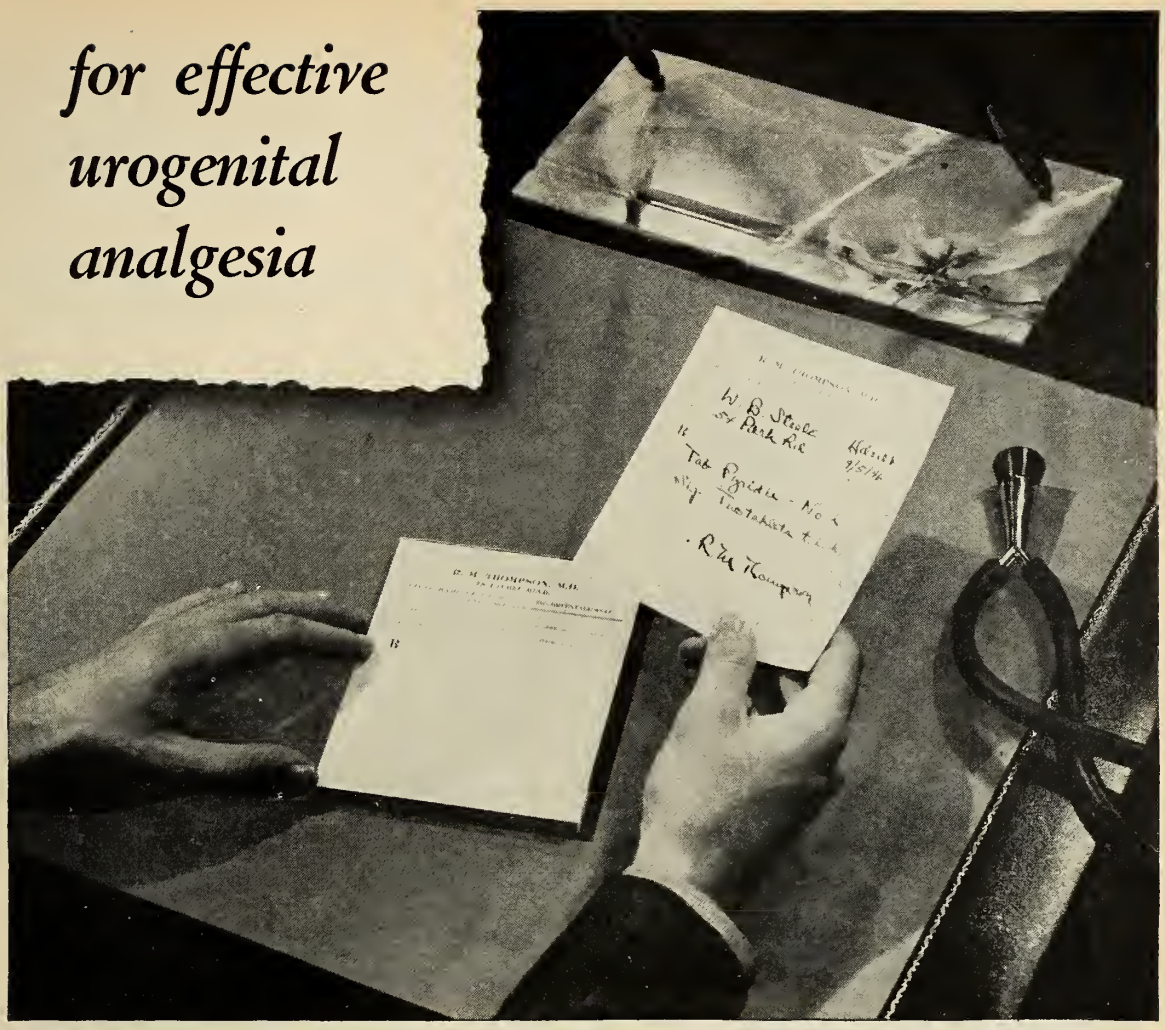
The meeting closed with a discussion period.

Case Won for Animal Experimentation. The suit recently brought by Lois Banfield, vice president of the Antivivisection League of Detroit, purporting to compel the city to abide by the strict letters of the ordinance governing the disposal of dogs by the dog pound, by which it was interpreted that dogs must be sold singly at auction and only if they were valuable as to breed, for pets, or hunting, came to trial on September 25, 1946. Nathaniel H. Goldstick, assistant corporation counsel of the city of Detroit, presented the defense for the city in a very masterful way, going into the issue which was really involved in this case, namely, an attempt to interfere with the use of dogs for experimental purposes by medical schools, hospitals and laboratories. A very strong case was presented for the necessity of using animals, in this case dogs, in experimental work.

Dr. Charles G. Johnston had arranged a splendid presentation of expert testimony by physicians, many of whom presented patients showing successful treatment that would have been quite impossible had there not been opportunity for extensive experimental work on dogs before the treatment could be applied safely to humans. Those who appeared to testify in the case were Dr. Ben I. Johnstone, Dr. F. D. Dodrill, Dr. Warren B. Cooksey, Dr. Oliver H. Gaebler, Dr. Roy D. McClure, Dr. Claude S. Bryan, professor of veterinary medicine and surgery at Michigan State College, and Dr. Bruce H. Douglas. The case was tried before Judge Arthur Webster in Circuit Court and on October 1, 1946, he

(Continued on Page 1546)

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OPHTHALMOLOGY IN THE WAR YEARS. Edited by Meyer Wiener, M.D., Professor of Clinical Ophthalmology, Wasbington University School of Medicine, Honorary Consultant in Ophthalmology, Bureau of Medicine and Surgery, United States Navy. Volume I (1940-1943) Chicago: The Year Book Publishers, Inc., 1946. Price $13.50.

The advances of ophthalmology during the years 1940 to 1943 have been written by a group of authors and authorities each taking a subject in which he is especially interested. Each section is written in a narrative form, mentioning all advances and special studies, and each section is followed by a complete list of references to world literature. There are literally thousands of these references making this volume a most accurate index for further study.

DIAGNOSTIC EXAMINATION OF THE EYE. Step-by-step Procedure. By Conrad Berens, M.D., F.A.C.S., Clinical Professor of Ophthalmology, Columbia University; Executive Eye Surgeon New York Eye and Ear Infirmary, formerly Chairman, Section on Ophthalmology, American Medical Association, formerly Chairman American Board of Ophthalmology; Consultant to the Air Surgeon of the Army Air Forces; and Joshua Zukerman, B.Sc., M.D., C.M., F.A.C.S., Instructor in Ophthalmology, New York Eye and Ear Infirmary, and Columbia University Postgraduate School; Diplomate American Board of Ophthalmology. 400 illustrations, including forty-eight in full color on thirteen plates. Philadelphia: J. B. Lippincott Company, 1946. Price $15.00.

This book presents a direct and well outlined step-by step-method of diagnosis of eye diseases. It is sufficiently technical, but is written for the use of the student as well as the ophthalmologist. It shows how to record the findings, how to interpret them, and gives in detail all the steps in a most complete eye examination.

One part of the book is devoted to special examinations for conditions which demand very special treatment or investigation, such as anisokonia, which is carefully given. Treatment in general is omitted, as this book devotes itself to diagnosis only. Very comprehensive and very well prepared.

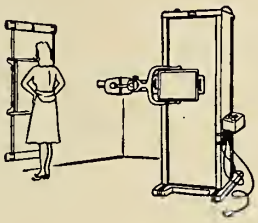
WOMEN IN INDUSTRY—Their Health and Efficiency. Issued under the auspices of the Division of Medical Sciences and the Division of Engineering and Industrial Research of the National Research Council. Prepared in the Army Industrial Hygiene Laboratory by Anna M. Baetjer, Sc.D., Assistant Professor of Physiological Hygiene, School of Hygiene and Public Health, The Johns Hopkins Hospital. Philadelphia and London: W. B. Saunders Company, 1946. Price $4.00.

The relation of women's health to industrial conditions has become of primary importance. The employment problem became acute with the advance of use of women in war industries. It was considered at first that women would fit into only relatively few industrial groups. This book is a response to the study undertaken to find the place of women in industry. The study is complete, and supported with statistics. The study covered the ability of women to work, their physique, types of work and policies of the plant in employment of women. A study was made of sick absenteeism of women, and a comparison with men employes. Accidental injuries afflicted men a little more often, but non-industrial accidents causing loss of working time were almost twice as frequent in women. Accidents on the first day of work were seventy-seven men to 252 women, the second day to the end of

(Continued on Page 1522)

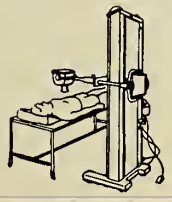
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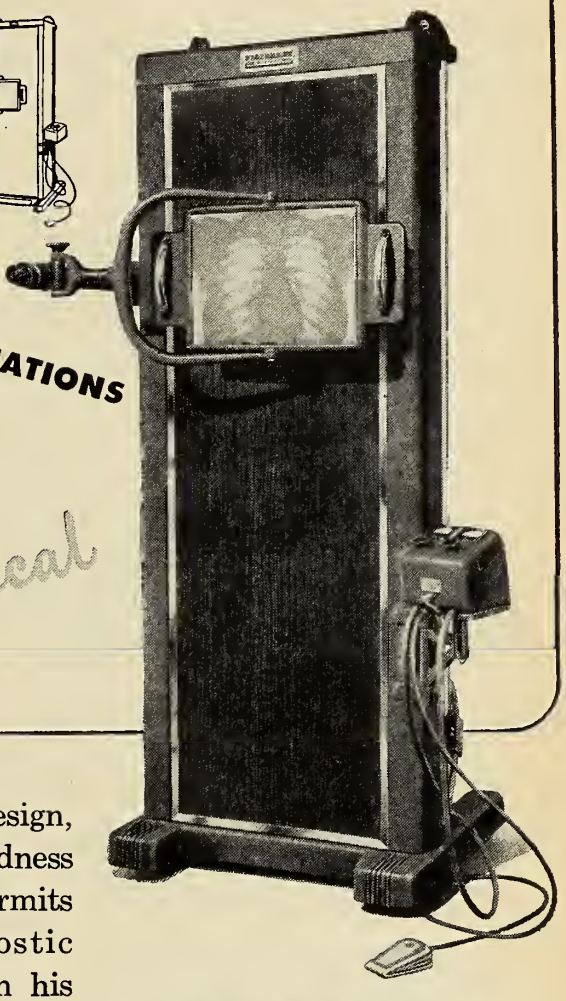


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(Continued from Page 1520)

the first week thirteen men and thirty-three women. After the second week they leveled off to fractions of one, and were about even. This little book is full of information invaluable to those dealing with women employed in industry.

HUMAN EMBRYOLOGY. By Bradley M. Patten, Professor of Anatomy in the University of Michigan Medical School. With 1,366 drawings and photographs, grouped as 446 illustrations with fifty-three in color. Philadelphia: The Blakiston Company, 1946. Price $7.00.

The heaviness of the scholastic demands on the medical student has caused the author to present the subject of embryology in its essentials, having full regard for a complete study, but eliminating all comparative and theoretical material. The book is complete, very readable, fully and carefully illustrated, and devotes special attention to the early stages of implantation and development, to supply a background for obstetrics and gynecology. A section is devoted to twins, double monsters and teratology. The development of all parts of the body is followed with detail sufficient for all purposes, medical or surgical. For further study in any given field a full bibliography is given at the back of the book.

A PRIMER FOR DIABETIC PATIENTS: An Outline of Treatment for Diabetes with Diet, Insulin and Protamine-Zinc Insulin, Including Directions and Charts for the Use of Physicians in Planning Diet Prescriptions. By Russell M. Wilder, M.D., Ph.D., F.A.C.P., Professor and Chief of the Department of Medicine of the Mayo Foundation, University of Minnesota; Senior Consultant in Division of Medicine, Mayo Clinic. Eighth Edition, Reset. 192 pages, with eight illustrations. Philadelphia and London: W. B. Saunders Company, 1946. Price $1.75.

What is diabetes, what is its cause, what will its treatment accomplish? These are some of the questions to be asked by the diabetic patient, and these are some of the questions well answered by this little book intended for the patient. It will help the doctor to help his patient. It is the ready and scientific answer the patient can have at his finger tips, and that will relieve the doctor of many interruptions in his busy rounds. Tests for sugar and diacetic acid are given, as well as diets.

PRACTICAL MALARIOLOGY. Prepared Under the Auspices of the Division of Medical Science of the National Research Council by Paul F. Russell, M.D., M.P.H., Colonel, M.C., A.U.S., Parasitology Division, the Army Medical School; Field Staff, International Health Division, Rockefeller Foundation (On Leave); Luther S. West, Ph.D., head of Biology Department, Northern Michigan College of Education; Major Sn.C., A.U.S., (Reserve) formerly Entomologist, Parasitology Division, Army Medical School; and Reginald D. Manwell, Sc.D., Professor of Zoology, Syracuse University, New York; formerly Captain Sn.C., A.U.S., Protozoology Section, Parasitology Division, Army Medical School. Foreward by Raymond B. Fosdick, President of the Rockefeller Foundation. 238 Illustrations, eight in Color. Philadelphia-London: W. B. Saunders Company. 1946.

This is a complete study of the most modern things known about malaria, its causes, modes of infection, forms of the parasites, methods of microscopic study, and treatment. This later includes the use of preventive materials, DDT, and others. Pictures of the infected sites of mosquito incubation, and means of combating the scourge. Malaria control under military conditions is especially treated with a goodly section of the book. This book is a must in regions of malaria. In our own state it is useful, for we are having cases, and we must know the best method of approach.

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CEREBRAL PALSY PROBLEM

(Continued from Page 1492)

way, reduplicating effort. The parents of these children, too, are anxious that their offspring be cared for. Educational programs designed to clarify the individual problems will go far in promoting co-operation in the home.

The excellent Crippled and Afflicted Program in the State of Michigan is exemplified in the qualified outpatient clinics strategically located. Hospitals and convalescent units already exist and understand the problems revolving about the crippled and afflicted child. Handicapped divisions (orthopedic schools) exist within the public school system and rehabilitation agencies are functioning each day. The need for a section to care for cerebral palsies in this organizational chain is obvious. The present clinics, hospitals, and convalescent units by augmenting their facilities to meet the requirements of a satisfactory training and schooling program will go a long way to cope with the problems presented by this group of cerebral palsied children.

Bibliography

1. Phelps, W. M.: Recent trends in cerebral palsy. Arch. Phys. Therapy, 23:332-336, (June) 1942.

THE VETERAN POPULATION

The veteran population of the United States on August 31 was 17,499,000, according to a Veterans Administration report, which revealed also that there were about 13,538,000 World War II veterans and about 3,961,000 veterans of World War I and other years. During the last week of the month, 104,664 veterans were being rehabilitated as disabled veterans under Public Law 16; 1,145,634 were receiving education and on-the-job training under Public Law 346, and 2,067,740 veterans were listed as receiving disability compensation and pensions.

—Editorial, *Journal AMA,* October 12, 1946.

WHAT'S WHAT

(Continued from Page 1510)

handed down a very complete opinion, dismissing the suit and indicating that the city was carrying out the spirit of the ordinance in providing for the sale of dogs to medical schools and laboratories. Because of the completeness of the presentation of the case and the clear-cut opinion handed down, it is believed that this should put an end to this type of litigation at least for some time.—*Detroit Medical News,* Oct. 14, 1946.

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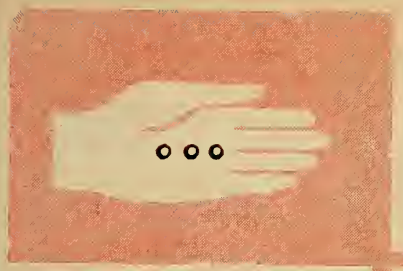
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1. Reznikoff and Goebel: J. Clin. Investigation 16:547, 1937.
2. Editorial: J.A.M.A. 127:1056, 1945.
3. Thompsett: Biochem. J. 34:959, 1940.

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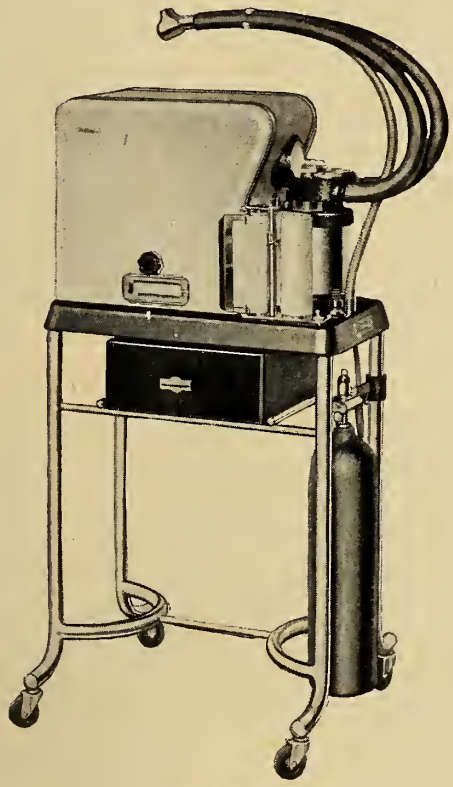
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Of a total of 436 preschool children immunized with PERTUSSIS ENDOTOXOID - VACCINE, not one child developed pertussis over a period of 2½ years.* During a similar period, 5.8 per cent of the children under seven years of age in the same city contracted whooping cough.

Ayerst PERTUSSIS ENDOTOXOID-VACCINE is both antibacterial and antiendotoxic, thus providing immunity to the H. pertussis organisms and to the endotoxin produced by these organisms.

Available in vials of 6 cc. and 24 cc.

Bacterial Vaccine and Bacterial Antigen Combined.
Made from H. pertussis phase I organisms.

* Brereton, T.C.: Canad. M.A.J. 54:358 (April) 1946.



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Proposal for Schools for Medical Associates

Under the Direction of the Colleges of Medicine and Dentistry of Wayne University, the University of Michigan, and the Michigan State Medical Society

FOREWORD

BY reason of the great need for Medical Associates, the proposed Bulletin descriptive of suggested courses is presented for consideration and study.

The direction of the plan could be carried through by the University of Michigan, Wayne University, and the Michigan State Medical Society.

Division of Clinical Laboratory Technicians

In providing information for the internist or surgeon, a clinical laboratory technician comes in closest contact with all concerned in obtaining and recording clinical facts relative to the patients.

For the individual scientifically inclined with sociological leanings, this is a field of exceptional opportunity.

Courses for Clinical Laboratory Technicians

(In addition to preliminary requirements elsewhere noted, subject material covers the following.)

I. Physiological Chemistry
II. Blood Analysis
  A. Immunology
    Serology
      Wassermann tests
      Kahn tests
      Kline tests
  B. Blood Typing
    Rh Factor
  C. Agglutination Typhoid
    Undulant fever, et cetera
III. Bacteriology
IV. Cutting and Preparation of Tissue
V. Electro-Cardiology
  A. Basal Metabolism
  B. Blood Bank (Typing)
  C. Allergy (Testing)
VI. Biological Chemistry
VII. Clinical Laboratory Methods
VIII. Practice of Medical Technology

Division of Dental Hygiene

The general function of the dental hygienist is to assist in the maintenance of the health of the mouth by prophylaxis, and instructing patients in methods of mouth cleanliness. The demand for the dental hygienist has arisen from recognition of the benefits to be derived from prophylactic care of the teeth, and from the fact that the needs of the public for such service is greater than can be supplied by dentists. Dental hygienists assist the dentist in operations and in the laboratory; they may be employed in schools, public institutions, and industrial plants under the supervision of the dentist. The dental hygienists are trained in insufficient numbers.

Possible Courses for Dental Associates

I. Dental Laboratory Technicians
  A. Carving and Preparation of Inlay Patterns
  B. Casting and Finishing Gold
  C. Processing and Finishing Dentures
  D. Arrangements and Alignment of Dentures
  E. Soldering and Welding in Partial Dentures

II. Dental Assistants at Chair
  A. Mixing of Materials
    Dental Alloy
    Cements
    Impression Materials
  B. Sterilization
    Casts
    Models
    Developing and Processing X-ray Films
  C. Et cetera

III. Dental Hygienist

First Year	*Second Year*
Anatomy	Bacteriology
Chemistry	Dental Materials and Manipulations
Child Health	English
Dental Anatomy	Materia Medica
English	Therapeutics
General Hygiene	Nutrition
Oral Hygiene	Oral Pathology
Orthodontic Technique	Radiology
Clinical Assignments	Office Management
Histology	Periodontology

Division of Dietetic Associates

One of the great world problems today is that of food. While this is being written, whole masses of the human race are dying because the production, distribution, and preparation of food is inadequate. One of the basic causes of war is the lack of food, or maldistribution of it.

(Continued on Page 1566)

Presented and prepared for consideration and study by the Commission on Health Care of the Michigan State Medical Society, September 22, 1946.

herapy in Arthritis

with Ertron-Steroid Complex, Whittier

★THERAPEUTICALLY EFFECTIVE

The unique chemical and clinical characteristics of Ertron have identified this important preparation as the outstanding agent in the treatment of arthritis today.

★CLINICALLY PROVED

With its twelve-year background of clinical application, Ertron therapy is established firmly as an effective and safe procedure. From the published reports it is evident that the action of Ertron is systemic, an essential feature in the treatment of a systemic disease such as arthritis.

★CHEMICALLY DIFFERENT

Chemically, it has been shown that the distinctive method of ergosterol-activation —the Whittier Process—provides in Ertron a number of recently isolated steroid substances of unique molecular structure.

Each capsule of Ertron contains 5 milligrams of activation-products, biologically standardized to an antirachitic activity of fifty thousand U.S.P. Units.

Physician control of the arthritic patient is essential for optimum results. Ertron is available only upon the prescription of a physician.

Supplied in bottles of 50, 100 and 500 capsules. Also—for supplementary intramuscular injection Ertron Parenteral in packages of six 1 cc. ampules.



Ertron is the registered trademark of Nutrition Research Laboratories.

ETHICALLY PROMOTED

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(Continued from Page 1562)

Where distribution is adequate or partial, the preparation of food, its analysis, and its balancing becomes essential. The manufacture of the vitamins is important, but manufactured vitamins are infinitesimal in importance as compared to the natural vitamins as properly prepared under the direction of the trained dietitian.

The field of dietetics has only been touched, and trained personnel is woefully inadequate. Whether in preparation to direct the dietetic department of a great hospital, a large population, or one's own kitchen, dietetics is indispensable.

Courses for Dietetic Associates

(The following courses subject to required preliminary high school and other requirements, constitute the major subjects for study in pursuing the course in Dietetics.)

I. Chemistry
   A. General Inorganic
   B. Organic
   C. Biochemistry
II. Biology
   A. Physiology
   B. Bacteriology
III. Social Sciences
   A. Psychology
   B. Sociology
   C. Economics
IV. Education
   A. Educational Psychology
   B. Methods of Teaching
   C. Principles of Education
V. Foods
   A. Food Selection and Preparation
   B. Head Planning and Service
VI. Nutrition and Dietetics
   A. Normal Nutrition (general)
   B. Advanced Nutrition
   C. Diet in Disease
VII. Institution Economics
   A. Quantity Cookery
   B. Organization and Management

The following may be added:

VIII. Analytical Chemistry
   A. Food Chemistry
   B. Advanced Biochemistry
   C. Advanced Physiological Chemistry
   D. Quantitative Chemistry
IX. Zoology
   A. General Biology
X. Advanced Psychology
   A. Personnel Management
   B. Community Organization
   C. Consumer Economics
   D. Economic Geography
XI. Methods of Teaching Nutrition
XII. Experimental Cookery
XIII. A course (seminar) which develops the ability to read and interpret current scientific literature
XIV. Accounting
   A. Institution Marketing
   B. Institution Equipment

Division of Medical Secretaries

The medical secretary who truly prepares to associate herself with the medical profession enters a field as distinctive in the realm of stenography and associated skills as does the court stenographer. The work requires the development in a sense, of a language peculiar to medicine. It is a distinctive field, and there are too few prepared to qualify. Medical secretaries now rank second to the clinical laboratory technicians in total numbers reported by hospitals.

Possible Courses for Medical Secretaries

I. Medical Stenography
II. Typing
III. Bookkeeping for Professional Office
IV. Business Correspondence
V. Business English
VI. Dictaphone
VII. Public Speaking
VIII. Business Arithmetic

Division of Medical Librarians and Library Research

The medical division of the public library, the library of the medical college, or of the hospital, is an important center of the institution. Every medical group is dependent upon excellent reference to books and to journals. "Without knowledge of what others have discovered, daily experience cannot be resourcefully interpreted." The medical library is essential in hospitals to interns and resident physicians, and is used for preparation of reports for staff meetings and clinical reference. To all physicians it serves as a continuation of their education. The person interested in the fields of scientific and literary research and in the field of the humanities, finds a rich field and satisfaction as a medical librarian.

In addition to library experience as outlined in regular library courses, the field of the Medical Librarian constitutes an important specialty.

Possible Courses for Medical Librarians

I. Organization and Functions of the Record Department
II. Interdepartmental Relations
III. Required Indexes

(Continued on Page 1568)



AGAIN IN 1946

"the best form of treatment"

"...gold salts...afford the best form of treatment in rheumatoid arthritis" and "...will markedly change the course of the disease in a significant percentage of patients."[1]

SOLGANAL-B OLEOSUM (aurothioglucose) continues to be one of the most widely used gold compounds because it provides maximum therapeutic benefits with minimal toxicity.

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In SOLGANAL-B OLEOSUM ($C_6H_{11}O_5SAu$) water soluble gold is suspended in oil solution to provide steady, even and prolonged absorption from intramuscular depots. In this form gold has benefited approximately four out of every five patients afflicted with rheumatoid arthritis.

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1. Ragan, C., and Boots, R. H.: New York Med. 2:21, 1946.

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(Continued from Page 1566)

IV. Medicolegal Problems
V. Statistics
VI. Staff Relationship
VII. Confidential Nature of Records
VIII. Insurance Reports

Division of Medical and Surgical Art and Photography

The demand in the field of Medical and Surgical Art is in excess of artists in this field. Both in the field of education in the Medical School, and in hospital practice, the artist has an important place. It is a field that is well paid, and to the individual with a combination of scientific interest and artistic talent, it offers fine opportunities.

Possible Courses in Medical and Surgical Art

I. The Medical and Surgical Artist
   A. Anatomy
   B. Free Hand Drawing
   C. Color
   D. Design
   E. Still Life
   F. Perspective
   G. Life Drawing
II. Medical Photography
   A. Cameras
   B. Making of Lantern Slides and Films
   C. Movie Projectors
   D. Chemistry of Photography
   E. Dark Room
   F. Finishing and Retouching
   G. Operating Room and Ward Procedure
III. Medical and Surgical Visual Education.

Division of Nursing

The care of sick people, whether of parents, or brothers or sisters, of babies, or neighbors, is inherent in the character of every woman to some degree. It begins in children in the care of their dolls.

This instinct, if it may be so called, began to take organized form, when as someone has said, "The nursing profession was born when one woman cared enough to risk position, reputation, and security to fight to see that her nation took care of its sick and wounded in the best possible way. She had to face great odds, prejudice, sneers and apathy. Her fight took her to the highest authorities in her government, through the red tape of army tradition, and brought a new healing force to the world. Today every nurse needs to rediscover those fighting qualities."

For the young woman graduating from high school or college and looking to the future, no vocation gives greater satisfaction in any field than this. Whether one goes on to active service, to teaching, or to becoming the mother in a house, no time is lost having been spent in training in the nursing profession, hallowed now in the memory and biography of that great nurse and benefactor to the human race—Florence Nightingale.

Division of Nursing Associates

Courses

(Subject to preliminary requirements, the following gives a brief outline of courses taken.)

I. Anatomy and Physiology
II. Microbiology
III. Chemistry
IV. Health Education
V. Phychology
VI. Nursing Arts
VII. Nutrition
VIII. Foods and Cookery
IX. Diet Therapy
X. Sociology
XI. History of Nursing
XII. Pharmacology
XIII. Medical Science
XIV. Medical and Surgical Nursing
XV. Surgical Specialties
   A. Operating Room
   B. Gynecology
   C. Ophthalmology
   D. Orthopedics
   E. Genito-Urinary
   F. Ear, Nose and Throat
XVI. Communicable Diseases and Tuberculosis
XVII. Obstetrical Nursing
XVIII. Pediatric Nursing
XIX. Medical Psychology (Psychiatric Nursing)
XX. Nursing and Health Service in the Family
XXI. Advanced Nursing and Elective Ward Management
XXII. Social Adjustments

Clinical Experience Includes

I. Preclinical
II. Medical Nursing
III. Surgical Nursing
IV. Operating Room
V. Diet Kitchen
VI. Pediatric Nursing
VII. Obstetrical Nursing
VIII. Special Services
   A. Communicable Disease Nursing (including V.D.)
   B. Tuberculosis Nursing
   C. Dermatology
   D. Orthopedic Nursing
   E. Gynecology and Genito-Urinary Nursing
   F. Eye, Ear, Nose and Throat Nursing

(Continued on Page 1572)

for Greater Systemic Response in Arthritis



IN the management of arthritis and its associated systemic disturbances, all the essential vitamins must be supplied in amounts many times greater than those required for normal maintenance.

Darthronol presents—in one capsule—nine vitamins in sufficiently large dosage to promote optimal therapeutic response in patients afflicted with chronic arthritis.

Complete bibliography on request.

536 LAKE SHORE DRIVE, CHICAGO 11, ILLINOIS

(Continued from Page 1568)

G. Out-Patient Department
H. Visiting Nurse Association
I. Psychiatric Nursing

Division of Occupational Therapeutics

For the bed patient who is sufficiently well, and the ambulatory patient, the helpfulness of Occupational Therapeutics is increasingly being recognized. There are three schools in Michigan now giving courses and offering clinical work in cooperation with various hospitals. College work is given at the State Normal School at Ypsilanti, Western Michigan College at Kalamazoo, and Wayne University. The field is relatively new and many Medical Associates in this field are needed.

Courses in Occupational Therapeutics

In addition to the preliminary college requirements, the following courses are given.

I. Biological
   A. Anatomy
   B. Kainesology
   C. General Medicine
   D. Tuberculosis
   E. Psychiatry
   F. Postoperative Surgery
II. Crafts
   A. Letter Work
   B. Weaving
   C. Braiding
   D. Metal Craft
   E. Printing
   F. Woodwork
   G. Basketry
III. Craft Analysis

Division of Ophthalmic Associates

The field of optics, the physics of light, the physics of mechanics and of eye movement, the biology and biological development of the eyes and their relationship to happiness and efficiency in life creates a fascinating field in the sociological and scientific world.

For the individual adapted to it, work of this very great importance to society presents an opportunity for association with the medical profession in the distribution of medical care that, earnestly pursued, can result not only in a vocation offering good financial reward but reward in the satisfaction of human service. In the modern world with the ever-increasing and exacting demands on vision, the field becomes as large as the population of the world itself.

The camera, the microscope, the telescope, their theory and use are all of concern to the ophthalmologist, and create a fascinating related hobby for the ophthalmic associate in the field of Photography, Microscopy, and Astronomy. The care of the eyes of the world is centered in the laboratory, office, and hospital of that branch of medical and surgical care known as Ophthalmology.

Courses for Ophthalmic Associates

(Brief Partial Outline Only). In addition to such preliminary training as shall be requested, and in addition to such clinic and laboratory hours as shall be presented, the following general outline of courses will be pursued, modified to the use of the ophthalmic associates.

I. The History of Ophthalmology
II. Embryology, Anatomy and Postnatal Development of the Eye
III. Physiology and Physiologic Optics
IV. Diseases and Pathology of the Eye. General Survey
V. Refraction
VI. Movements of the Eye Ball and Their Anomalies
VII. Orthoptic Training
VIII. The Eye and the Nervous System
   A. Neuro-Ophthalmology
   B. Visual Disturbances of Central Origin
   C. Ocular Symptoms in Diseases of the Brain
   D. Spinal Cord and Meninges
IX. Perimetry
   A. The Color Sense and Its Derangements
   B. Aniseikonia
X. Surgery
   B. Bacteriology
XI. Laboratory Techniques
   A. Pathology
   (General Considerations Only)
XII. The Fitting of Frames
XIII. The Camera, Microscope, and Telescope

Division of Orthopedic Technicians

There is scarcely a branch of the whole field of medicine and surgery more closely integrated in its effects on the whole human body and mind than the field of Orthopedic medicine and surgery. Some one has said that while Napoleon remarked that "an army marches on its stomach," no matter how full their stomachs may be, soldiers will not march far with painful feet. During the first World War 30 to 40% of all men examined were found to have disabilities resulting from flat or weak feet or other foot disturbances. If this is true of those in the selective service age among young men, what of the rest of the whole population from infancy to old age?

A man may be as old as his arteries but he acts as old as his feet and legs. Surely "the race moves

(Continued on Page 1574)

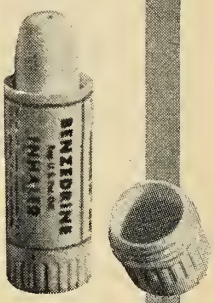
A valuable intranasal agent
"... for the patient to use, between treatments or when it is not convenient to take one, is the Benzedrine Inhaler."

Wier, F.A.: Clin. Med. & Surg. 43:217.

Between office treatments... your

head-cold patients will be grateful for the relief of nasal congestion afforded by Benzedrine Inhaler, N.N.R. The Inhaler produces a shrinkage of the nasal mucosa equal to, or greater than, that produced by ephedrine—and approximately 17% more lasting.

Each Benzedrine Inhaler is packed with racemic amphetamine, S. K. F., 250 mg.; menthol, 12.5 mg.; and aromatics.



Benzedrine Inhaler

a better means of nasal medication

Smith, Kline & French Laboratories, Philadelphia, Pa.

(Continued from Page 1572)

forward on the feet of little children." To the young man or woman interested in mechanics, in the field of sociology, and in association with the profession of medicine, a field of service of financial competence is here visualized. It is an associate field to medicine and surgery, and it relates also to the great shoe industry. It is a field that gives satisfaction in human service.

Courses for Orthopedic Technicians

(Brief partial outline only. Preliminary requirements elsewhere noted.)

I. General Brief Studies of Embryology and Anatomy of the Human Body
   Special Detailed Studies of the Spine, Hips, and Lower Extremities
   Comparative Anatomy of the Extremities
II. Congenital Defects and Deformities
III. Biomechanics of the Spine, Hip, Knee, Ankle and Foot
IV. Basic Principles of Foot and Ankle Disturbances
V. General Pathological Defects of the Feet and Ankle
VI. Basic Principles of Treatment of the Foot and Ankle
   Non-operative treatment
   Rest and Pain
   External Appliances
   Physical Therapy
   Exercises
   Massage
   Contrast Baths
   Manipulation
   Shoes
   Felt Pads
   Arch Supports
   Adhesive Plaster
   Bandages
   Braces, Casts, Splints, Crutches
   Artificial Limbs
   Plaster of Paris and Plaster Bandages
   X-ray Techniques
   Plaster Models of the Feet
VII. Effects and Treatment of Poliomyelitis
VIII. Dermatological Affections of the Foot and Ankle
IX. Abnormalities and Affections of the Toenails
X. Foot Hygiene and Sanitation
XI. The Relation of the Back Pelvis, Hip and Thigh to the Foot and Ankle

Division of Physical Medicine

Physical Medicine in its most elemental forms has been used as agents of medicine since the recorded history of the human race. In more recent years a greater scientific application in the use of light, heat, cold, water, electricity, and mechanical agents has been formulated, so that mechanical and physical measures are now extensively used in the diagnosis and treatment of disease.

In most of our large sanitariums and in the physical therapy departments of many hospitals, facilities are available for the use of these measures, and in some countries such as Sweden, extensive use is made of physical medicine. It is very common in such countries as these for men to devote their lives to the subject of massage, electrotherapy, thermotherapy, et cetera.

In the practice of medicine and surgery in America the value of these measures is becoming increasingly better known as they are increasingly utilized. The AMA now has an organization council on Physical Therapy, and the American Congress of Physical Therapy is helping to disseminate knowledge of this branch of medicine. It becomes, therefore, a field of great importance in the practice of medicine and affords a vocation for many men and women who wish to be associated with the medical profession in the prevention, treatment, and cure of disease.

The modern physician who keeps abreast of the great advances in the physical sciences and brings them to the assistance of his patients depends upon the physical therapy technician to contribute widely to the scope of his services.

Courses in Physical Medicine

I. History of Physical Therapy
II. Thermotherapy
   A. General Application of Heat
   B. Local Application of Heat
   C. Local and General Application of Cold
III. Light Therapy
   A. The Physics of Light
   B. Sources of Therapeutic Light
   C. Physiological Effects of Light
   D. Technique of Application of Light Rays
   E. Indications for Ultra-Violet Irradiation
   F. Indications for Luminous Heat Infra-red Radiation
IV. Electrotherapy
   1. The Constant Galvanic or Direct Current
      A. Physics of Electricity
      B. Sources and Methods of Production of Constant Current
      C. Physiological Effects of Constant Current
      D. Technique of Application of Constant Current
      E. Indications for Therapeutic Use of Constant Current
      F. Contraindication, Dangers, and Limitations of Use of Constant Current
   2. Static Electricity
      A. Physical Effects of Static Electricity
      B. Techniques of Application
      C. Indications for Employment
      D. Contraindications for Employment

(Continued on Page 1576)

SODIUM NICOTINATE AMPULS

(Hartz)

Each 5 c.c. ampul contains 100 mg. of Sodium Nicotinate

For prompt relief of idiopathic headache, migraine, and post spinal tap encephalalgia. Has been used with some success in treatment of premenstrual and hypertensive headaches.

Effects noted in from 30 to 45 seconds following intravenous injection, and appears to be correlated with the degree of peripheral flush.

Packaged as follows:

6 ampuls
25 ampuls
100 ampuls

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7 FLOORS OF MEDICAL AND SURGICAL SUPPLIES



(Continued from Page 1574)

3. Faradic Current
4. The Interrupted Galvanic and Sinusoidal Currents
5. Diathermy

V. Hydrotherapy
1. General Hydrotherapy
A. Physics
B. Sources (Methods of Application)
Baths
Pools
Sprays
Douches
Affusions
Packs
Et cetera
C. Physiologic Effects
D. Techniques of General Application
E. Indications for Employment of General Hydrotherapy
F. Contraindications, Limitations, and Dangers of General Hydrotherapy
2. Local Hydrotherapy
A. Physics
B. Sources
Baths
Sprays
Irrigations
Local packs or compresses
C. Physiologic Effects
D. Techniques of Local Application
E. Indications for Employment of Local Hydrotherapy
F. Contraindications, Dangers, and Limitations of Local Hydrotherapy

VI. Mechanotherapy
1. Massage
A. History of Massage
B. General Anatomy
Special consideration to:
the skin
connective tissue
muscles
the large blood vessels
the large nerve trunks
the large viscera of the abdomen
the bones, joints, and ligaments
C. The Physiological Effects of Massage
D. The Therapeutic Applications of Massage
E. The Mechanical Procedures of Massage
F. Joint Movements
G. Massage of Special Regions
2. Exercise
A. Physical Principles
B. Sources and Methods of Administering Correction or Therapeutic Exercise
C. Physiology of Exercises
D. Techniques and Medical Management
E. Occupational Therapy
F. Indications for Employment of Therapeutic Exercises
G. Contraindications, Dangers, and Limitations of Therapeutic Exercises
3. Rest and Relaxation
4. Mechanical Devices

VII. Clinical Aspects of Physical Medicine
A. Physical Therapeutics in Relation to General Medicine and Surgery
B. Physical Therapeutics of Arthritis
C. Physical Therapeutics in Relation to Orthopedic Surgery
D. Backache (Relation of Physical Therapeutics to Its Management)

VIII. The Hospital and Office Departments of Physical Therapy
A. Agencies which will give advice on departments of physical therapy
B. Construction of Department
C. Personnel
D. Treatment in the Department

Division of X-Ray Technicians

The x-ray technician who serves as important part of the personnel in the organization of a roentgenologist, is a division of medical associates who come in close contact with the technical aspect of the practice of medicine and surgery, and offers a field to the person adapted to it that is superior in the field of technology.

Courses for X-Ray Technicians

(In addition to requirements elsewhere noted, the following main divisions are required.)

I. Physics
A. Physics of Light
B. Mechanics of Physics
C. X-Ray Machines
II. Chemistry of Photography
A. Dark Room Procedure
III. Anatomy
IV. Ethics
V. Hydrotherapy
VI. Clinical Practice
VII. Et cetera

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BASAL METABOLISMS BY APPOINTMENT ONLY
Electrocardiograms, 1 to 4:30 P. M. and by Appointment
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No ciliary inhibition . . .

No caking . . . No clumping

sulfathiazole



● Five minutes after instillation of Paredrine-Sulfathiazole Suspension in a convalescent nose, the cilia are already forming streams of Micraform sulfathiazole.



● 35 minutes later, the cilia have swept almost all the sulfathiazole away. There is no caking or clumping on *ciliated* epithelium. A few crystals, dried by inspired air, still adhere to the *non-ciliated* anterior borders of the turbinates and to the vibrissae.

Smith, Kline & French Laboratories

Philadelphia, Pa.

County Secretaries' Conference

Seventy-one persons attended the County Secretaries' Conference held September 25, 1946, on the occasion of the 81st Annual Session of the Michigan State Medical Society in Detroit.

Michael A. Gorman, Editor of the *Flint Journal*, highlighted the program with "A Newspaperman's View of the Medical Profession."

"Modern Medical Public Relations" was discussed by Hugh W. Brenneman, Lansing, MSMS Public Relations Counsel.

L. Fernald Foster, M.D., Bay City, MSMS Secretary, presented a talk on "Medicine Moves Forward."

G. B. Saltonstall, M.D., Charlevoix, Chairman of Secretaries, acted as toastmaster.

The twenty-four County secretaries present at the Conference were:

U. M. Adams, M.D., Cass; L. M. McBryde, M.D., Chippewa-Mackinac; T. Y. Ho, M.D., Clinton; D. R. Smith, M.D., Dickinson-Iron; R. B. MacDuff, M.D., Genesee; F. T. Lossman, M.D., Grand-Traverse-Leelanau-Benzie; J. J. McCann, M.D., Ionia-Montcalm; J. R. Brink, M.D., Kent; Ray M. Duffy, M.D., Livingston; D. B. Wiley, M.D., Macomb; S. A. Stealy, M.D., North Central Counties; Wm. S. Jones, M.D., Menominee; Florence Ames, M.D., Monroe; Thomas J. Kane, M.D., Muskegon; L. Fernald Foster, M.D., Bay; G. B. Saltonstall, M.D., Northern Michigan; Charles H. Flint, M.D., Oceana; W. F. Strong, M.D., Ontonagon; G. J. Kemme, M.D., Ottawa; A. L. Callery, M.D., St. Clair; M. R. French, M.D., Van Buren; L. Dell Henry, M.D., Washtenaw; Warren Babcock, M.D., Wayne; Gordon C. Tornberg, M.D., Wexford; and Executive Secretaries, Sara Burgess of Genesee County and Else Kolhede, Wayne.

W. B. Harm, M.D., Detroit, President of the Wayne County Medical Society, was also present.

MSMS officers who attended included:

Councilors C. E. Umphrey, M.D., Detroit, Wilfrid Haughey, M.D., Battle Creek, R. C. Pochert, M.D., Owosso, W. E. Barstow, M.D., St. Louis, D. W. Myers, M.D., Ann Arbor and E. R. Witwer, M.D., Detroit.

Among others who attended were:

Louis H. Clerf, M.D., Philadelphia; J. M. Robb, M.D., C. E. Simpson, M.D., R. L. Novy, M.D., E. C. Texter, M.D., E. C. Long, M.D., and C. L. Candler, M.D., of Detroit; Eugene C. Keyes, M.D., Dearborn; E. I. Carr, M.D., Lansing; T. K. Gruber, M.D., Eloise; S. L. Loupee, M.D., Dowagiac; M. R. Burnell, M.D., and Sara Burgess, Flint; John Foster, Executive Secretary, South Dakota Medical Association; Ray E. Smith, Executive Secretary, Indiana State Medical Association; Wm. J. Burns, Executive Secretary, Michigan State Medical Society; Rosemary Wurzer, Professor F. E. Armstrong, Captain L. A. Potter, J. C. Ketchum, Gordon Goodrich, Harry Lipson and H. W. Brenneman.

Michigan Veterans' Trust Fund

Michigan is recognized throughout the country as a leader among states in providing for the emergency needs of its servicemen of World War II. The Legislature set aside from surplus in the State Treasury, a postwar reserve fund of $50,000,000 "for the purpose of liquidating Michigan's obligations, after termination of the war, to its returning servicemen, their widows or dependents" and subsequently created the Michigan Veterans' Trust Fund and its Board of Trustees, giving it control of the Fund and outlining in general terms provisions for administration.

The Fund is administered entirely by World War II veterans, solely for the benefit of World War II veterans and their dependents. The money is actually on hand for the purposes set forth.

The corpus of the Fund will remain intact, and the annual income now running comfortably over $1,100,000 will be available to veterans and their dependents for emergency needs in years to come.

An "emergent need" is one arising in the life of a serviceman or woman which requires funds over and beyond his ability to pay from earnings or accumulated savings, creating a temporary situation that cannot be sufficiently promptly met through normal channels available under Federal or State laws or private organizations.

For instance, emergency medical treatment and hospitalization of a veteran who is ineligible or unable to procure this service elsewhere, would be considered an "emergent need" by the administrators of the Michigan Veterans' Trust Fund. The income from the Fund may be considered practically a "bread and butter" resource to those who find themselves out of work and with families to be fed, clothed and sheltered and supplied necessary health service.

Administration decentralization, to achieve greater efficiency, has been obtained by the creation of Fourteen Districts and Local Committees.

For information on personnel of local committees or on any phase of the Trust Fund activities, contact the Executive Secretary, L. J. Lalone, Cadillac Square Bldg., Detroit 26.

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From September 18, 1945 to November 1, 1946

Allegan County Medical Society	$ 85.
Anonymous (Memory of Mother)	$ 1,000.
Regis F. Asselin, M.D., Detroit	5.
R. H. Baribeau, M.D., Battle Creek	50.
Barry County Medical Society	50.
M. G. Becker, M.D., Edmore	1,000.
A. P. Biddle Estate	2,933.81
Branch County Medical Society	85.
C. D. Brooks, M.D., Detroit	1,000.
J. D. Bruce, M.D., Ann Arbor	1,000.
A. S. Brunk, M.D., Detroit	1,000.
E. I. Carr, M.D., Lansing	1,000.
H. R. Carstens, M.D., Philadelphia, Pa	1,000.
L. G. Christian, M.D., Lansing	100.
R. E. Clark, M.D., Detroit	25.
Clinton County Medical Society	50.
C. V. Costello, M.D., Holland	1,000.
H. H. Cummings, M.D., Ann Arbor	1,000.
A. C. Curtis, M.D., Ann Arbor	15.
J. S. DeTar, M.D.	1,000.
Dickinson-Iron County Medical Society	80.
Eaton County Medical Society	70.
A. C. Furstenberg, M.D., Ann Arbor	1,000.
L. J. Gariepy, M.D., Detroit	1,000.
Genesee County Medical Society	1,000.
Robt. W. Gillman, M.D., Detroit	1,000.
Gratiot-Isabella-Clare County Medical Society	125.
Grand Traverse-Leelanau-Benzie County Medical Society	167.50
T. J. Heldt, M.D., Detroit	25.
Lee Hileman, M.D., Ecorse	10.
Hillsdale County Medical Society	95.
L. J. Hirschman, M.D., Detroit	1,000.
L. E. Holly, M.D., Muskegon	1,000.
Houghton-Baraga-Keweenaw County Medical Society	140.
R. J. Hubbell, M.D., Kalamazoo	1,000.
Huron County Medical Society	55.
Wm. A. Hyland, M.D., Grand Rapids	1,000.
Ingham County Medical Society	1,572.50
S. W. Insley, M.D., Detroit	1,000.
Jackson County Medical Society	350.
Joint Committee on Health Education	1,000.
Francis Jones, M.D., Lansing	1,000.
F. H. Lashmet, M.D., Petoskey	100.
Lenawee County Medical Society	125.
S. R. Light, M.D., Kalamazoo	100.
Macomb County Medical Society	130.
Manistee County Medical Society	100.
Marquette-Alger County Medical Society	135.
F. F. McMillan, M.D., Charlevoix	100.
Mason County Medical Society	35.
Mecosta-Osceola-Lake County Medical Society	45.
H. A. Meinke, M.D., Hazel Park	50.
Menominee County Medical Society	55.
Michigan Medical Service	10,000.
Mrs. K. B. Miner, Flint	1,000.
Monroe County Medical Society	145.
H. R. Moore, M.D., Newaygo	1,000.
H. L. Morris, M.D., Detroit	1,000.
Muskegon County Medical Society	310.
R. L. Mustard, M.D., Battle Creek	1,000.
Cora Boyce Neal, Grand Rapids	1,000.
Ontonagon County Medical Society	15.
Wm. H. Parks, M.D., Petoskey	100.
A. W. Petersohn, M.D., Battle Creek	25.
L. B. Rasmussen, M.D., Vicksburg	25.
Lawrence Reynolds, M.D., Detroit	1,000.
J. M. Robb, M. D., Detroit	1,000.
J. M. Robb, M.D., Detroit (Memorial to the late J. D. Bruce, M.D.)	100.
John Rodger, M.D., Bellaire	100.
G. B. Saltonstall, M.D., Charlevoix	1,000.
Sanilac County Medical Society	50.
C. A. Scheurer, M.D., Pigeon	20.
E. F. Sladek, M.D., Traverse City	5,000.
Ferris N. Smith, M.D., Grand Rapids	1,000.
St. Clair County Medical Society	220.
Shiawassee County Medical Society	1,000.
H. B. Steinbach, M.D., Detroit	100.
R. H. Stevens, M.D., Detroit	1,000.
C. L. Straith, M.D., Detroit	1,000.
R. H. Strange, M.D., Mt. Pleasant	1,000.
Jerrian VanDellen, M.D., East Jordan	100.
Ralph Wadley, M.D., Lansing	1,000.
R. V. Walker, M.D., Detroit	1,000.
Washtenaw County Medical Society	200.
H. L. Weitz, M.D., Traverse City	100.
C. G. Wencke, M.D., Battle Creek	10.
John O. Wetzel, M.D., Lansing	1,000.
E. L. Whitney, M.D., Detroit	25.
S. B. Winslow, M.D., Battle Creek	50.
E. R. Witwer, M.D., Detroit	1,000.
Margaret H. Zalen, M.D., Kalamazoo	5.

(Pledge Card on page 1590)

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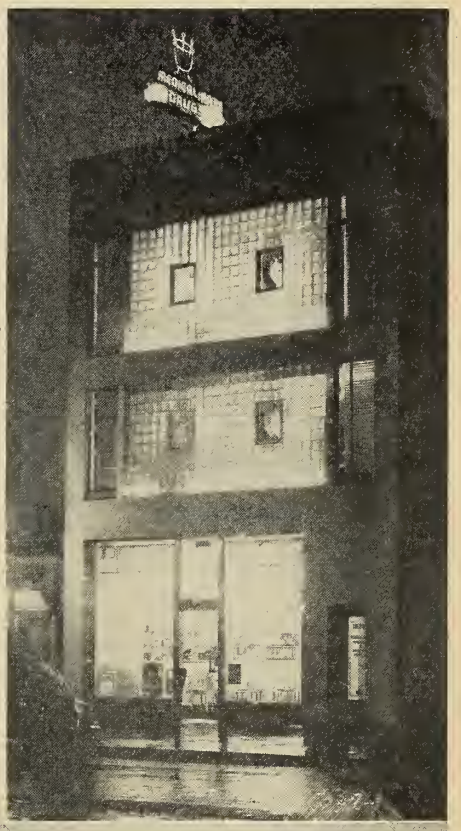
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Say you saw it in the Journal of the Michigan State Medical Society

You and Your Business

VOLUNTARY MEDICAL CARE PLANS APPROVED

The American Medical Association has adopted the plan of issuing approval of voluntary medical care plans which meet its standard. The first action was the approval of nine plans as follows:

California Physicians' Service, San Francisco; Iowa Medical Service, Des Moines; Michigan Medical Service, Detroit; Surgical Care, Inc., Kansas City, Mo.; Nebraska Medical Service, Omaha; Medical-Surgical Plan of New Jersey, Newark; Ohio Medical Indemnity, Inc., Columbus; Medical-Surgical Association of Pennsylvania, Harrisburg; and the Oregon Physicians Service, Salem.

Recently E. J. McCormick, Chairman of the Council on Medical Service, announced the approval of eighteen additional plans, making now twenty-seven approved. The newly approved plans are:

Physicians Association of Clackamas County, Oregon City, Oregon; Hospital Service Corporation, Birmingham, Alabama; Florida Medical Service Corporation, Jacksonville; North Idaho Medical Service Bureau, Lewiston; Genesee Valley Medical Care, Rochester, N. Y.; Hospital Saving Association of North Carolina, Chapel Hill; Oklahoma Physicians Service, Tulsa; Coos Bay Hospital Association, Coos Bay, Oregon; Pacific Hospital Association, Eugene, Oregon; Klamath Medical Service Bureau, Klamath Falls, Oregon; Group Medical and Surgical Service, Dallas, Tex.; The Dallas County Medical Plan, Dallas, Tex.; Surgical Care, Inc., Roanoke, Va.; Medical-Surgical Service, Inc., Clarksburg, W. Va.; Marion County Medical Service, Inc., Fairmont, W. Va.; Medical-Surgical Care, Inc., Parkersburg, W. Va.; the West Virginia Medical Service, Wheeling; and the Hospital Service Association, Oakland, Calif.

More than eighty voluntary plans sponsored by the medical profession are now operating, and application for approval have been received from several additional ones.

CANCER CONTROL PROGRAM— ANOTHER FIRST FOR MICHIGAN

Feeling that the time had arrived to co-ordinate, as far as possible, all state cancer control activities to avoid duplication of effort and expense, Wm. A. Hyland, M.D., President MSMS, has enlarged the Cancer Control Committee this year to include the members of the Professional Executive Committee of the American Cancer Society, Michigan Division, and representatives of the Michigan Department of Health.

Under the chairmanship of Norman F. Miller, M.D., Ann Arbor, three subcommittees have been formed to study (1) the problems of lay and professional education; (2) the collection and distribution of funds for cancer control; and (3) the extent of the cancer problem in Michigan together with the needs of local areas to render a more competent and adequate service to cancer patients.

To make the work of the Committee more effective, President Hyland has appointed F. L. Rector, M.D., a member of the Ingham County Medical Society, as full-time secretary with offices at 1313 East Ann Street, Ann Arbor. For the past five years Dr. Rector has been in charge of the cancer program of the Michigan Department of Health and has devoted most of his time to cancer education.

The Michigan Department of Health has been allocated $86,000.00 of Federal funds through the USPHS this year for cancer control activities in this state. The American Cancer Society, Michigan Division, will also have greatly increased funds at its disposal. The Cancer Control Committee will help plan programs and expenditure of these funds as well as offer a general information service on cancer problems in Michigan and elsewhere.

So far as is known, MSMS is the first state medical society to employ a full-time medically trained secretary to carry on its cancer control activities.

TWIN CONFERENCE IN DETROIT, FEBRUARY 2-8

The *Annual County Secretaries' Conference* and the *Annual Public Relations Conference* will be held jointly at the Book Cadillac Hotel, Detroit, on Sunday, February 2, from 10:00 a.m. to 4:30 p.m. By meeting together in this fashion, a super-excellent program can be expected. Every county and district society secretary is urged to attend as is each member of the Michigan State Medical Society Public Relations Committee, and the chairman of every county society public relations committee. These doctors are asked to bring with them the president or president-elect, the county bulletin editor, and other county society officers. Railroad transportation or auto mileage together with necessary overnight expenses at the hotel are authorized for secretaries, county public relations committee chairman and members of the MSMS Public Relations Committee. All other officers are invited to the meeting and noon-day dinner on February 2.

"Mystery" Meeting.—The noon-day program on February 2 will not be announced until the day of the meeting in Detroit. This will be a *surprise*, with an outstanding speaker!

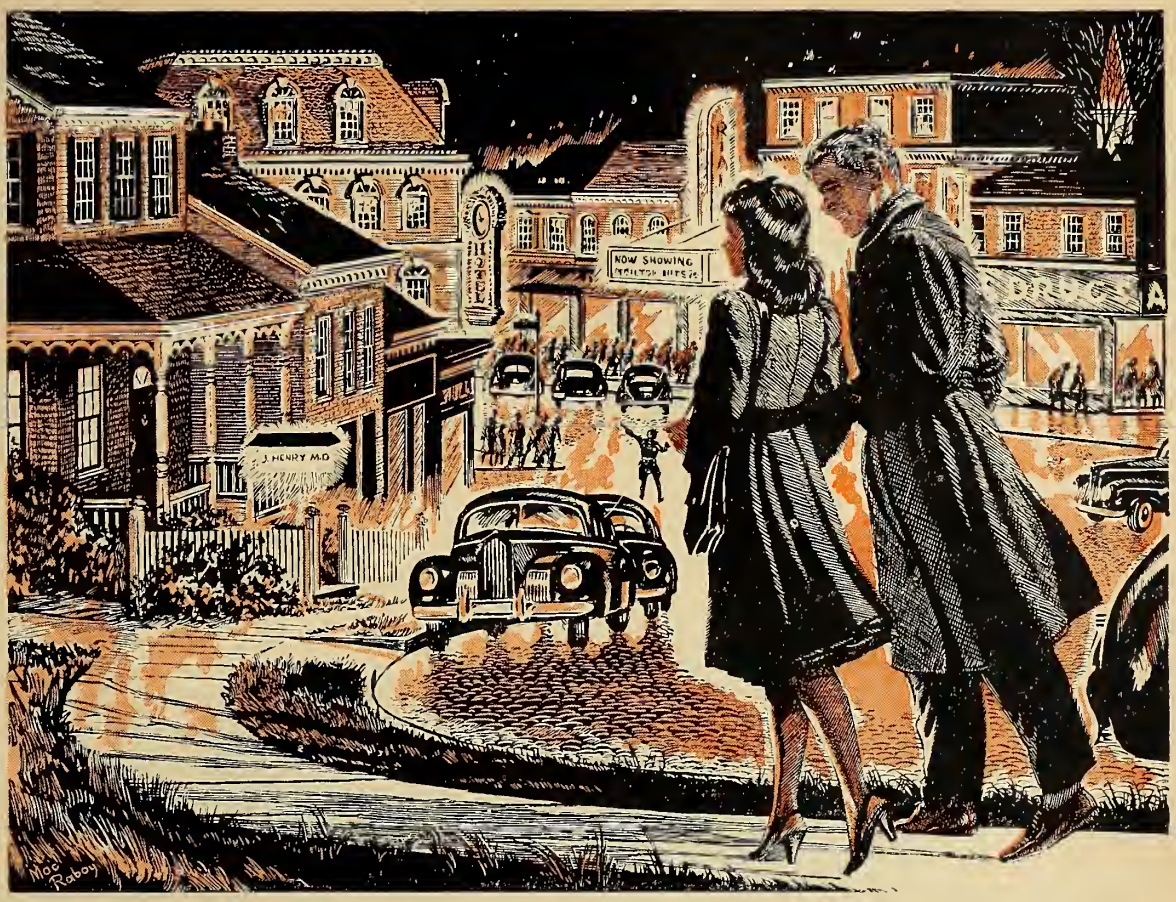
COURSES IN MEDICAL ECONOMICS AT UNIVERSITY OF MICHIGAN

The University of Michigan Medical School sponsored a course on medical economics which began November 19. Three lectures were presented to the senior class on November 19, 22 and 26.

Four lectures also were presented to the junior class November 23-30 and December 7-14.

These courses were made possible through the co-operative endeavor of Dean A. C. Furstenberg of the University of Michigan Medical School and the officers of

(Continued on Page 1588)



Truly, this is America . . . Saturday Night!

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COURSES IN MEDICAL ECONOMICS

(Continued from Page 1586)

the Michigan State Medical Society. Lecturers chosen to present some of the subjects included R. S. Morrish, M.D., Flint, Immediate Past-President, MSMS; L. Fernald Foster, M.D., Bay City, Secretary, MSMS; and Wilfrid Haughey, M.D., Battle Creek, Editor, JMSMS.

The opportunity to enlarge the program for classes to follow is presented. Congratulations, University of Michigan Medical School, on this forward step!

PROCEDURE FOR MSMS SPECIAL MEMBERSHIPS

WHEREAS, The presentation of candidates for special memberships in the Michigan State Medical Society is ordinarily made by the various delegates, and

WHEREAS, The customary procedure of presentation of these candidates is time consuming and repetitious, therefore, be it

RESOLVED, That a Committee of the House of Delegates be appointed to deal with all recommendations for special memberships, and be it further

RESOLVED, That all such recommendations for special memberships be presented to the chairman of this committee prior to the first meeting of the Annual Session of the House of Delegates for presentation in toto by the Chairman of this Committee at the Annual Session of the House of Delegates, and be it further

RESOLVED, That due and satisfactory notice of this procedure be given all secretaries of all county medical societies by information in the Secretary's Letters and by printed notice in THE JOURNAL of the Michigan State Medical Society for two succeeding months prior to the Annual Session of the House of Delegates of the Michigan State Medical Society.

—1946 MSMS House of Delegates.

CIVILIAN MEDICAL CONSULTANTS TO SECRETARY OF WAR

More than four hundred civilian physicians have now been appointed as consultants to the Secretary of War. The latest list included Arthur C. Curtis, M.D., Ann Arbor; Ivan E. Berlein, M.D., Detroit; Roscoe W. Cavell, Detroit; William A. Scott, Kalamazoo; James W. Hubley, M. D., Russell L. Mustard, Richard A. Stiefel, Wilbur O. Upson, M.D., all of Battle Creek; Paul L. Cusick, M.D., Detroit; Charles F. Wilkerson, M.D., Robert C. Kimbrough, Albert C. Furstenberg, M.D., William D. Robinson, M.D., Ann Arbor; Franklin H. Top, M.D., Detroit.

MEDICAL PLANS CONTINUE TO GROW

Enrollment in thirty-nine medical-surgical plans coordinated with Blue Cross hospital service plans reached a total membership of 3,026,446 on July 1, after a second quarter growth of 384,395 members, the largest in their history.

United Medical Service, affiliated with the New York City Blue Cross, chalked up the greatest second-quarter gain with 76,692 new members. The largest of the doctor-bill prepayment plans continues to be Michigan Medical Service, with 847,881 persons protected, followed by California Medical Service Groups with 290,000 members, Massachusetts Medical Service with 275,000 members, and United Medical Service, with 274,849 members.

New plans are: Kansas Physicians Service; New Mexico Physicians Service; Genesee Valley Medical Care, Inc., administered through the Rochester Blue Cross Plan; North Dakota Physicians Service; Surgical Care, Milwaukee; the recently established service of the Oregon Blue Cross; and the program offered by the Puerto Rico Blue Cross Plan.

VETERANS OPPOSE COMPULSORY HEALTH INSURANCE

The following resolution was unanimously adopted at the Twenty-eighth National American Legion Convention, in San Francisco, October 4, 1946.

Resolution

WHEREAS, Veterans who have served in the armed forces now have available to them hospital and medical care provided by the United States Government; and

WHEREAS, There are countless voluntary health insurance plans now being offered by the physicians and the insurance companies; and

WHEREAS, Proposed plans of compulsory health insurance would increase the tax burden and bring about regimentation of the medical profession; and

WHEREAS, All forms of compulsion are repugnant to our American way of life since our liberties and opportunities would be circumscribed; now, therefore be it

RESOLVED, That the National Assembly of the American Legion hereby expresses its opposition to compulsory health insurance.

ARMY TRAINED 115,000 MEDICAL TECHNICIANS DURING WAR

In the first figures made public on the number of technicians trained during the war, Major General Norman T. Kirk, The Surgeon General, reported that 114,997 enlisted men qualified as technicians from July, 1939, to June, 1946.

Twelve general hospitals and medical centers of the Army offered courses for enlisted technicians in X-ray, veterinary medicine, medicine, surgery, dentistry, laboratory, pharmacy, meat and dairy inspection, orthopedic machinery, medical equipment maintenance and sanitation. For those technicians who showed special progress, advanced courses were given.

Since the war ended and large numbers of enlisted technicians have been released to private life, many are now employed in a civilian capacity at the same jobs they learned in the Army.

Ex-GIs now may be found assisting dentists in their offices in making dental prostheses or preparing fillings. Farms and animal hospitals are profiting from the knowl-

(Continued on Page 1590)



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ARMY TRAINED 115,000 MEDICAL TECHNICIANS DURING WAR

(Continued from Page 1588)

edge of veterinary technicians. Civilian hospital laboratories and clinics employ many ex-soldiers who learned their trade through schooling and practical experience in a war which saw 15,000,000 patients admitted to Army hospitals for treatment of practically every ill known to the medical profession.

HIGH SCHOOL ATHLETIC ACCIDENT BENEFIT PLAN

The Athletic Accident Benefit Plan of the Michigan High School Athletic Association, now in its seventh year, is one of voluntary co-operation on the part of high schools of the state in the interest of aid in the conduct of their physical education, intramural, and inter-scholastic athletic programs. Schools report the injuries received by their registered students directly to the Benefit Plan office, with proof of injury blanks completed by school officials and physicians or dentists attending students, and all claim payments are made directly to schools.

During the past six years, the Benefit Plan has paid 6,111 claims representing eight per cent of the students registered for a total of $93,206.24. At the present time, 533 Michigan high schools with 20,807 registered students are members of the plan. To date 1,566 injuries have been reported for this year.

Member schools report all injuries received by registered students within fifteen days after the injury occurs, thus inculcating upon the students the value of prompt attention to injuries, even though termed minor. The experience of Michigan and that of other states has resulted in improved playing conditions for all athletic contests and the development of safer playing equipment. Likewise, rules changes have resulted from a study of injury statistics. Due to the desirability of coverage of students participating in intramural athletics, the number of registered students has tripled in six years while the number of member schools has doubled.

The Athletic Accident Benefit Plan is sponsored and authorized by the Michigan High School Athletic Association, but the actual administration is vested in an Administrative Committee composed of five schoolmen of the state and the secretary, who is the State Director of High School Athletics. It is the purpose of this group to give all possible aid to the high schools of the state in their athletic programs, and to return as large a percentage as possible of the membership and students registration fees received, 88 per cent of which were returned during the year 1945-46 for allowed scheduled injuries. A unique phase of the Michigan plan is the consideration at the end of the school year of non-scheduled injuries, after all scheduled benefits have been paid; last year, over $4,000 were paid for such injuries.

The Benefit Plan appreciates the co-operation which it has received from schoolmen of the state, doctors of medicine and dentists in making it successful. Its phenomenal growth is indicative of the need which it has filled.

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or **(5) In my Will** ☐

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Editorial Comment

AN OUTDATED SLOGAN

Senator Taft has outlined a sensible alternative to the plan to place the country in a medical strait jacket under the guise of compulsory health insurance.

Instead of the Wagner-Murray-Dingell measure, which provides for a payroll tax to raise three to five billion dollars annually for free medical service to all people, Senator Taft favors a bill which would give free medical care to those unable to pay for it and leave the remainder of the nation unregimented.

This bill, introduced by Senators Taft, Ball and Smith, provides for federal aid in offering medical care, but the guidance of the program would be in the hands of the states and local governments so that local public opinion could be effective in its operation. The bill would enable federal money to be used to encourage the formation of voluntary health insurance funds by private and cooperative agencies.

It is estimated that the Taft-Ball-Smith Bill would cost $200,000,000 a year. This is a far cry from three to five billion dollars annually for the Wagner-Murray-Dingell system, which, Senator Taft pointed out, would call for the hiring of nearly 500,000 non-medical employes "to administer the plan and offices set up in every city and village in the United States."

Last week's elections sounded a loud protest against bureaucracy and regimentation. Thus they give a clue to the probable fate of the Wagner-Murray-Dingell Bill. As the features of the Taft-Ball-Smith Bill suggest, there are other methods of providing medical care for those unable to pay for it, and at a fraction of the cost of the bureaucratic measure. The secret slogan of the New Deal, "billions for bureaucracy," is happily out of date.—Editorial, *B.C. Enq-News*, Nov. 10, 1946.

THIS TOTTERING WORLD

Atlas was having a difficult time holding the world aloft until Socrates taught the world to look to reason for stabilization, and medicine under the stimulus of Hippocrates and Socrates initiated the age of enlightenment.

Under Greek influence, medicine for the first time was free and democratic. With the exception of the mad, and the morons, people learned to keep their heads, their own little worlds, squarely on their shoulders. This individual balance helped to secure collective equilibrium, thus enabling Atlas to hold the world in its appointed place.

The coming of Socialism and Communism in this modern era has robbed Atlas of the steadying influence which came through individual balance and we feel the world swaying on the Titon's tired shoulders. With North America looking upon socialistic trends as the way to redemption and the bureaucrats standing ready to rob Atlas of his main stabilizing force—medicine as a free enterprise—we may expect the crash unless we "Wake up America."

If Atlas, created for the task, is having a hard time with the wobbly cockeyed world, how can Mr. Altmeyer, the Surgeon General of the Public Health Service and their bureaucratic cohorts hope to cope with it after knocking the last prop out?

In the eyes of the thinking citizens of the United States, they are either too busy to look the proposed adventure squarely in the face or they are the world's prize egotists. Perhaps some of the cortex they are counting on may prove to be cheap cork. Shall we be damned by their exaltation, or shall we act upon the knowledge at hand and put them in their places?—Editorial, *Oklahoma State Medical Association,* October 1946.

EMIC

At the last meeting of the House of Delegates in May, the House passed a resolution which in effect stated that inasmuch as EMIC was conceived in an emergency during the war and inasmuch as the emergency has passed the Nebraska State Medical Association views the program at the present time as an unnecessary and unwarranted system in which the doctor who participates is selling his birthright for a mess of pottage. It is a softening up process whereby the bureaucrats are simply getting people accustomed to so-called free medical service in preparation for a huge compulsory sickness-insurance program. In the opinion of the House of Delegates the participation by the doctors is the best aid that our social uplifters can receive in promulgating a national system of medical care administered from Washington. The Journal was requested to bring this to the attention of the members of the Nebraska State Medical Association and to request them to co-operate in warding off socialization of the medical profession.—Editorial, *Nebraska State Medical Journal,* November 1946.

(Editor's Note: See our editorial on this subject, September, 1946, page 1227.)

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Conjunctivitis—Acute, Hemolytic, Staphylococcus Aureus

Lt. Col. M. D. Campbell, MC
Detroit, Michigan

A continuous problem presents itself to the eye service at the Regional Station Hospital, Orlando Army Air Base, Orlando, Florida. The predominating factor in this ever-present conjunctivitis, acute, catarrhal, is the hemolytic and non-hemolytic staphylococcus aureus. Other etiological factors are minimal compared to the frequency of staphylococcus aureus infections that involve the conjunctiva.

Bacteriology

A culture from the surface of the conjunctiva, the caruncle and adjoining inner canthal palpebral skin, was obtained in one hundred and seven cases.

Three groups may be established. In group A the cultures were negative. These were taken from the mild cases, and it was assumed the absence of growth in the culture was due to a paucity of organisms.

Non-hemolytic and slightly hemolytic staphylococcus albus was the usual report in group B. The clinical progress of the conjunctivitis conformed to the early signs and symptoms of a progressing staphylococcus aureus infection. The staphylococcus albus cultures were considered slightly pathogenic or incidental or were difficult to differentiate from the staphylococcus aureus.

Non-hemolytic and hemolytic staphylococcus aureus comprised group C. Lt. Colonel P. Thygeson at Drew Field suggested the use of the coagulose test. This was found positive in the hemolytic strain, when marked infections of the conjunctiva and cornea were the rule. Non-hemolytic staphylococcus aureus and albus coagulose reports were negative, as well as the slightly hemolytic staphylococcus albus cultures.

Etiology

A series of situations take place to set the stage for the clinical picture. The performer is the staphylococcus aureus and the stage is the conjunctiva which, in these cases, is susceptible to the infection or reacts to the bacterial invader in an allergic manner. The following conditions are responsible for the infections:

1. Weather. The sebaceous and sweat glands in the palpebral skin are active in warm weather and noticeably so when an increase in humidity is associated.

2. Bacteria. The source of staphylococci is in the skin.[2] The skin of the lower eyelid is the essential contaminating culprit. In an examination of the pathogenicity of various types occurring in palpebral and conjunctiva infections, Burkey (1933) differentiates three varieties. The first, a hemolytic and a toxin producer; the second, non-hemolytic and non-toxic, but pathogenic; the third, non-hemolytic, non-toxic, and non-pathogenic. All types may assume hemolytic properties (Julianelle—1922; Gowen—1934) and mutations from the "rough" type to the "smooth" can be constantly observed in all stages (Gowen—1934).

Dr. Campbell, formerly with the AAF Regional Station Hospital, Orlando Army Air Base, Orlando, Florida, is now practicing in the Washington Square Building, Royal Oak, Michigan.

Moreover, the opposite attenuation phenomenon of "smooth" to "rough" becomes evident both in the conjunctiva and the skin around it in recovery from infections, and in those persons in whom resistance to staphylococcal infection of the skin is high. Some strains have the power of producing an extremely powerful and sometimes lethal exotoxin (Burnet & Kellaway—1930) to which patients may become allergically hypersensitive.

3. Palpebral topography. The very thin, palpebral skin is indented with a multitude of wrinkles and lines. These tributaries are confluent at the inner canthus. Little streams of bacteria-laden secretion empty into the space around the caruncle and by capillary action spread with the lacrimal secretion along the intermarginal space of the lid margins. The lower dependent lid is the usual source from which the infection spreads to the shafts of the lashes in the lid and by contact to the intermarginal space and lashes on the upper lid. The constant winking or blinking of the lids not only transfers the infection to the lacrimal secretion, but smears it over the bulbar conjunctiva and cornea.

4. Contamination. The natural response to wet, greasy, and itchy lids takes the form of rubbing the lids, lashes, and especially the inner canthus with the fingers. This maneuver sows the palpebral area with more and diverse organisms.

5. Nervous behavior. As the threshold for pain varies with people, so does the controlled or uncontrolled response to irritation. The lack of instinctive or learned knowledge that guides a potential case of conjunctivitis to a prophylactic procedure, as avoiding rubbing of the eye, is a factor. The minimal sensation experienced by certain people in the presence of marked signs of inflammation further allows the spread of a virulent infection.

6. Immunity. People are endowed with, or without, natural or artificial immunity to organisms. Bacterial virulence ranges from non-toxic and non-pathogenic to toxic and pathogenic. A preponderance of one property over the other leads to the embarrassment of the weaker.

Symptoms

The symptoms, in order of intensity, are itchiness, smarting, burning, sandiness, stickiness, occasional blurring of vision, crustiness, lid-sticking, photophobia, and eye ache. The symptoms or interpretation of sensations by the nerve endings in the conjunctiva and cornea are not comparable to the signs. Some nervous systems make a great fuss over minor signs and symptoms, and others ignore major ones.

Progressing Signs

1. Vascular changes are first confined to the conjunctiva of the lower lid, appearing as a diffuse, fine, papillary hyperemia. This papillated appearance is observed in the upper fornix and over the conjunctival surface of the tarsus of the upper lid in the later severe stages of an active conjunctivitis.

2. Aqueous mercurochrome (4 per cent) and fluorescence (5 per cent) are used to stain the bulbar conjunctiva and cornea. Comparative slit lamp examinations reveal an advancing process where one observes in sequence:

(a) Discreet pin-point red-stained spots. These are confined entirely to the exposed bulbar conjunctiva. The spots are congregated around the caruncle. They are especially scattered near the margin of the cornea.

(b) A red smear of spots of color radiating down below the lower lid margin from the limbus between 5 and 7 o'clock into the lower fornix.

(c) Subconjunctival edema beneath these red spots and the red color may be observed to have penetrated into the subconjunctival tissue. In addition, grayish-white distinct infiltrations may also be observed in the edema under the red spots when the condition is more severe, especially at the limbus margins around 9 and 3 o'clock.

(d) Corneal changes begin as fine, pin-point green stippling that may become grouped into a red mottling. The early changes occur in the lower aspect of the cornea and spread discreetly upward over the pupil becoming increasingly dense in the lower and central cornea as the process increases in severity. At 9 and 3 o'clock on the limbus a severe process may take place. The conjunctiva mounds up, revealing a deeply-stained adjacent corneal ulceration. Infiltration is observed under the mound and the edematous conjunctiva protrudes between the lid margins.

(e) Vascular, papillary, dull red, thickened, mucous membrane changes are marked in the upper and lower fornices. The tarsal and bulbar conjunctivae are red and thick in addition to the corneal changes described above.

(f) Small pellicles of pus are observed floating on the abundant lacrimal secretion of the everted

lower fornix or adherent to the conjunctiva of the upper fornix.

(g) Edema of the upper and lower lids.

(h) Blepharitis marginalis is a complication that occasionally follows an acute infection. It incites acute exacerbations that often continue for years.

Treatment

Medicinals and procedures:

1. Cocaine hydrochloride (0.5 per cent) solution.
2. Seventy per cent ethyl alcohol solution.
3. Mercurochrome, 4 per cent (aqueous).
4. Equal parts of a solution of 5 per cent anhydrous aluminum chloride and sodium salicylate (gr. 10 to an ounce of 70 per cent ethyl alcohol).
5. Mercurochrome, 10 per cent. aqueous.
6. Boric acid solution, 5 per cent.
7. Compounded prescription:

Adrenalin chloride (1/1000)	M.	10
Boric acid	gr.	1
Aqua Camphor	dr.	1
Aqua distilled, qsad	oz.	1
Add 0:06 per cent Lugol's sol.	oz.	1

Dispense in one-half ounce small colored bottles.
Sig: 2 drops in each eye, twice daily.

8. Silver nitrate (1 and 2 per cent) solutions.
9. Tri-chlor-acetic acid (20 per cent solution) and silver nitrate (50 per cent) solution.
10. Allergy investigation.
11. Sulfadiazine (gr. 5) and soda bicarbonate (gr. 10) capsules taken five times daily as ambulatory doses.
12. Hospitalization and administration of sulfadiazine, gm. 7 to 10, daily with proper amounts of water and soda bicarbonate to obtain a blood level of 10 mg.
13. Penicillin.

Local sulfonamide and penicillin applications were enthusiastically applied without the proportionate success and were discontinued. The medicines are listed in the above order to indicate the ones required in treatment as the severity of the infection progressed.

1. Cocaine solution is a vaso-constrictor and a local anesthetic. The anesthesia is important to eliminate the discomfort attending the application of mercurochrome, silver nitrate, et cetera. The vaso-constrictor action, in blanching the lid conjunctiva, indicates a return to normal vascular control where previously cocaine had no effect on the dilated capillaries. The patient's complaints cease at this stage, and he is discharged from the outpatient clinic.

2. A cotton-tipped applicator lightly saturated with 70 per cent ethyl alcohol is used to cleanse the intermarginal surface of the lids, the lashes, the creases in the skin of the upper and lower lids, and the adjacent brow, nasal bridge and cheek.

3. A drop of 4 per cent aqueous mercurochrome solution is instilled into the lower fornix, or may be applied to the everted conjunctival surfaces of the upper and lower fornices and tarsi.

4. A careful application of the aluminum chloride and sodium salicylate solution is made on the skin of the upper and lower lids as well as on the skin of the brow, face and bridge of the nose. The patient experiences a feeling of stiffness and dryness about the eyes that is the result of diminished glandular activity and stiffening of the superficial epithelium of the skin. This application must not approach the lashes or canthi but be applied so that it will dry quickly and not run.

5. A moderate application of 10 per cent aqueous mercurochrome solution is artistically applied to the bases of the lashes, the intermarginal space, the skin of the upper and lower lids, and around the inner canthus.

Mercurochrome might almost be considered a specific for staphylococcus infection. Two and one-half per cent aqueous mercurochrome was diluted in a ratio of 1 to 5, 120,000 parts of isotonic saline sterile solution. To 2.5 c. c. of the latter solution, 1/10 c. c. of a twenty-four hour culture of standard strain 209 hemolytic staphylococcus aureus was incubated without growth.

The color reminds the patient to avoid putting his fingers in or near his eyes. Mercurochrome stains and penetrates the epithelium to devitalize the organisms. A desire for overtreatment by certain patients is inhibited by the continuous "red-eyed" appearance.

6. A 5 per cent boric acid solution is used to bathe the eyes night and morning.

7. With the adrenalin, boric acid, camphor, and Lugol (ABCL), 2 drops are dropped into the eye in the barracks twice daily after eye bathing and more frequently if possible. Adrenalin is used to combat hypersensitiveness, by keeping the size of the conjunctival blood vessels to their normal caliber; boric acid, to make the solution of a pH 4, is indicated to inhibit staphlyococcal bacterial growth; camphor is an astringent, and iodine (Lugol's) is antiseptic.[1]

8. Silver nitrate (1 or 2 per cent) solution is applied to the upper and lower fornix and the conjunctiva covering the tarsi. Normal saline lavage follows the application.

9. Tri-chlor-acetic acid (20 per cent) solution or 50 per cent silver nitrate solution is carefully damped into the mouths of the infected glands and the ulcerated craters surrounding the lashes. The lashes in the infected lash beds are withdrawn before the above application. Penetration is abet-

ted and staphylococci bacterial action destroyed.

10. Allergic investigation is imperative. Water for liquids and beverage is advised. Desserts are to be avoided. Most of the aggravating allergins are found in non-essential drinks and desserts. Meat, dark breads, butter, soups, salads, raw and cooked vegetables form the basis of the daily meals. Potatoes and bread may be offenders and require further elimination from the diet. Sensitization tests should follow and further arrangements made for desensitization by the allergy service.

11. Sulfadiazine, administered internally, has been found to be very effective in severe infections. Local sulfa and penicillin washings have been disappointing. Capsules containing sulfadiazine gr. 5 and sodium bicarbonate gr. 10 are prescribed (after meals and two at bedtime) for outpatient cases. Suitable water intake is advised.

12. Patients requiring hospitalization received enough of the sulfadiazine, sodium bicarbonate and water regime to assure a sulfa blood level of 10-12 mgms. per cent. Penicillin (as in 13) was used to accentuate the expected beneficial effects of sulfa in certain hospital cases.

13. Hospitalization and intramuscular injection of 25,000 units of penicillin, every three hours daily, has been very efficient in the sub-acute and acute stages. It has been disappointing in the confirmed chronic stage.

Results

From the files for the months of December, January, February, 107 cases were studied. Fourteen patients received ten or more treatments with an average of fourteen treatments per patient. The remaining ninety-three received less than ten treatments, with an average of three visits per patient. Two enlisted men and one dependent required hospital and clinical care for infections that reached the phlyctenular keratitis stage. A woman dependent was admitted with a diagnosis of panolphthalmitis. She received sulfadiazine by mouth and intramuscular penicillin into the buttocks and deltoid muscles that were kept at low temperatures by ice bags. An evisceration was performed. A culture of hemolytic staphylococcus aureus was recovered from the pus taken from the intraocular contents.

Conclusions

1. A particular cause of eye infection in this locality is the hemolytic staphylococcus aureus.

(Continued on Page 1680)

A Comparative Study of Mercuhydrin and Mercupurin, Oral and Parenteral

By M. B. Finkelstein, M.D., and
Charles J. Smyth, M.D.
Eloise, Michigan



M. B. Finkelstein



Charles J. Smyth

Since the introduction of the mercurial diuretic merbaphen (Novasurol) in 1920 by Saxl and Heilig,[17] there has been a continuous search for a more effective and less toxic agent of this type. Brunn[3] in 1924 introduced salyrgan (Mersalyl), and Issekutz and Vegh[20] in 1928 reported that diuresis was produced by mercupurin. Salyrgan and mercupurin are complex mercurial salts containing 5 per cent theophylline. It has been demonstrated by De Graff et al.,[4,5,6] that the addition of theophylline to the mercurial salts increases their rates of absorption, enhances their diuretic effects, decreases their toxicity, and in particular reduces their local irritating properties.

In 1938, Geiger and Vargha[10] reported the results of a pharmacological and clinical investigation of the new mercurial diuretic, the sodium salt of oxy-mercuri-allyl-succinyl-carbamide. It possessed low toxicity and had a marked diuretic effect. For this compound they proposed the following structural formula:

$$\begin{array}{l} CH_2\text{-}CH\text{-}CH_2\text{-}NH\text{-}CO\text{-}NH\text{-}CO\text{-}CH_2CH_2\ COONa \\ OH\ HgOH \end{array}$$

They further characterized this preparation as a white powder, which is insoluble in water, with

From the Departments of Medicine of Wayne University College of Medicine, Detroit, Michigan, and the Wayne County General Hospital and Infirmary, Eloise, Michigan.

This study was supported in part by a grant from the Lakeside Laboratories, Inc., Milwaukee, Wisconsin.

a melting point of 185° to 186° and containing 46.4 per cent mercury. They studied the toxic and diuretic effects of this preparation in mice, dogs, rabbits and in children with postdysenteric edema, and found that it had a strong diuretic action. They also administered this drug both intravenously and intramuscularly to adults with cardiac edema and edema due to other causes, and achieved intensive diuresis. They concluded that "this preparation is particularly effective and in therapeutic doses is absolutely harmless—it causes neither pain nor local reactions when administered by intramuscular injection."

In 1942, Nuhfer, Mellish and Buchter[16] reported the toxicity, absorption, and diuretic properties of a compound resembling that prepared by Geiger and Vargha. This chemical compound was N-(3 methoxy- 2 oxymercuripropyl) N-succinylurea. According to these investigations this new compound has the following structural formula:

$$\begin{array}{l} CH_2\text{-}CH\text{-}CH_2\text{-}NH\text{-}CO\text{-}NH\text{-}CO\text{-}CH_2\text{-}CH_2\ COOH \\ OCH_3\ HgOH \end{array}$$

The sodium salt of this compound combined with theophylline is supplied under the trade name *Mercuhydrin.** Each cubic centimeter of the aqueous solution of this preparation contains 39 mg. of mercury and 48 mg. of theophylline. The amount of mercury in this new drug is approximately the same as that contained in the two mercurial diuretics in common use (salyrgan: 39.6 mg. per c.c., and mercupurin: 39 mg. per c.c.).[12]

The purpose of the present study was to evaluate the diuretic and toxic effects of this new compound, mercuhydrin, and to compare these results with those obtained with mercupurin.

Method of Study

Selection of Patients.—All patients (206) included in this study were hospitalized throughout the period of observation. There were 129 patients who received mercuhydrin and 77 who received mercupurin. The majority (117) of those who were treated with mercuhydrin had edema due to cardiac disease, two had the nephrotic syndrome, and ten had ascites due to portal cirrhosis. The edema in all of the patients treated with mercupurin was due to cardiac disease.

Routine Care.—On admission to the hospital all patients were placed at strict bed rest. Every one received a low-salt diet (2.8 gm. sodium chloride daily). Those patients with edema due to cardiac failure, who had not received digitalis, were completely digitalized and then were maintained on digitalis throughout the period of observation. If, at the time of admission, they had been receiving a maintenance dose of digitalis, this drug was continued. On admission to the hospital, a complete blood count, urinalysis, electrocardiogram, and a blood nonprotein nitrogen level were obtained. These studies were repeated at intervals during the period of observation. In a few cases, urea clearance tests were performed before and after the mercuhydrin was given. In many instances, single samples of morning urine were obtained for examination of the urinary sediment, twenty-four and forty-eight hours following the administration of the diuretic.

All patients were weighed every morning at approximately the same time; a standard platform scale was used. When the patient weights became stable under the bed rest, low-salt diet and digitalis, mercurial diuresis was instituted. In many cases, all evidence of clinically detectable edema had disappeared before the mercurial diuretic was started.

Mercuhydrin was administered to one group in 1 c.c. or 2 c.c. doses, either intramuscularly or intravenously. Mercupurin was administered intravenously to another group in doses of 1 c.c. or 2 c.c. The interval between injections varied from four to seven days. Five tablets of mercupurin† were given orally to twenty-five patients as a single morning dose.

If no diuresis occurred following the mercurial drugs, as judged by the weight loss, or if the amount of diuresis was considered inadequate, the patient was given enteric-coated ammonium chloride tablets in doses of 8 gm. daily for three days, followed by mercuhydrin or mercupurin on the fourth morning. One of the mercurial preparations was given to a few patients with severe decompensation before their weights became stable.

In each of the patients with ascites due to liver disease, the diagnosis was established by peritoneoscopy and liver biopsy. All of the patients with ascites due to portal cirrhosis received a high-protein, high-carbohydrate, low-fat and low-salt diet;

*Mercuhydrin is the trade name for N-(3 methoxy-2 oxymercuripropyl)N succinylurea manufactured by the Lakeside Laboratories, Inc., Milwaukee, Wisc.

†The tablets of mercupurin were supplied by the courtesy of Campbell Products, Inc. Each tablet contains 100 mg. of mercuperin powder, equivalent to 30 mg. of mercury and 27 mg. of anhydrous theophylline.

otherwise the plan of management was similar to that used in the patients with cardiac edema.

Results

During the course of this investigation, a total of 535 injections of mercuhydrin were given; 234 injections were administered to 112 patients by the intramuscular route and 301 injections were given to fifty-one patients by the intravenous route. In thirty-four patients this drug was given both intramuscularly and intravenously. The diuretic effect as judged by the amount of weight loss in the 24-hour period following each injection was determined in 332 instances. Fifty of these injections were preceded by a three-day preparatory period of ammonium chloride therapy. The remaining 203 injections were given to patients considered too ill to be weighed daily; conclusions drawn from these patients pertain primarily to local and general toxic effects.

Mercupurin was given by the intravenous route to fifty-two patients; a total of 232 injections were given. Ammonium chloride, in doses of 8 gm. per day for three consecutive days preceding a single injection of mercupurin, was used on thirty-six occasions. Mercupurin, administered orally in a single dose of five tablets, was studied on fifty-six occasions in twenty-five patients.

TABLE I. WEIGHT LOSSES OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAMUSCULAR AND INTRAVENOUS ADMINISTRATION OF 1 C. C. AND 2 C. C. DOSES OF MERCUHYDRIN

DISEASE	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS	INJECTIONS SHOWING NO WT. LOSSES	AVERAGE WT. LOSSES IN POUNDS
HEART DISEASE	1 CC. I.M.	41	5	2.65
	1 CC. I.V.	70	10	2.26
	2 CC. I.M.	52	2	3.56
	2 CC. I.V.	73	4	3.23

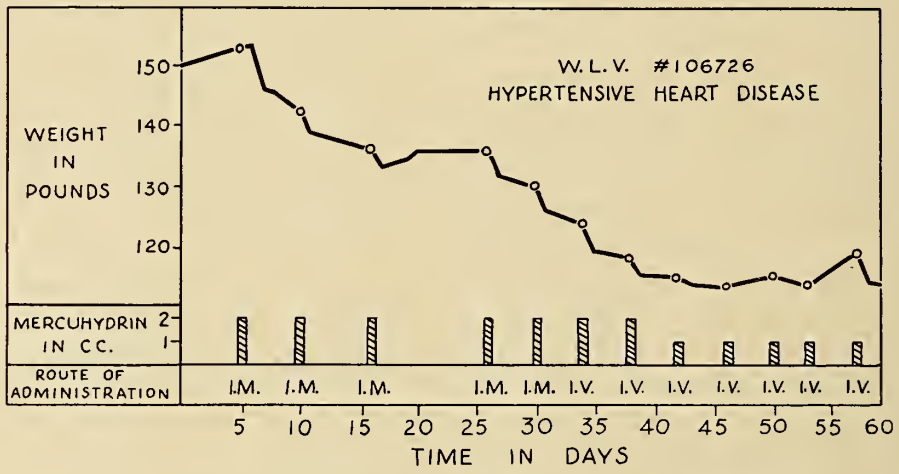


Fig. 1. Diuretic effect in pounds of weight loss following mercuhydrin.

In Table I are summarized the results obtained with mercuhydrin given intramuscularly and intravenously in 1 c.c. and 2 c.c. doses to patients with edema due to heart disease. The average weight loss obtained with the 1 c.c. dose given intramuscularly was 2.65 pounds (1.2 Kg.); with the same dose intravenously the average weight loss was 2.25 pounds (1. Kg.). The average weight loss observed with the 2 c.c. dose given intramuscularly was 3.56 pounds (1.6 Kg.); with the same dose given intravenously the average weight loss was 3.23 pounds (1.4 Kg.). Occasionally, diuresis failed to develop when mercuhydrin was given alone, both with the 1 c.c. and

the 2 c.c. doses; however, these failures were less frequent with the larger dose. In general, more consistently good results were obtained with the 2 c.c. dose. The patient W.L.V. (Fig. 1) with edema due to hypertensive heart disease illustrates satisfactory diuresis as reflected by the weight loss travenously the average weight loss was 8.27 pounds (3.8 Kg.). These data indicate that the diuretic effect was consistently greater in those instances where ammonium chloride preceded the mercurial diuretic than with the mercurial diuretic alone, and with the preliminary medication

TABLE II. WEIGHT LOSSES OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAMUSCULAR AND INTRAVENOUS ADMINISTRATION OF 1 C. C. AND 2 C. C. DOSES OF MERCUHYDRIN PRECEDED BY AN AMMONIUM CHLORIDE PREPARATORY PERIOD.

DISEASE	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS	INJECTIONS SHOWING NO WT. LOSSES	AVERAGE WT. LOSSES IN POUNDS
HEART DISEASE	1 CC. I.M.	12	0	4.66
	1 CC. I. V.	5	0	5.80
	2 CC. I M.	4	0	11.25
	2 CC. I. V.	11	0	8.27

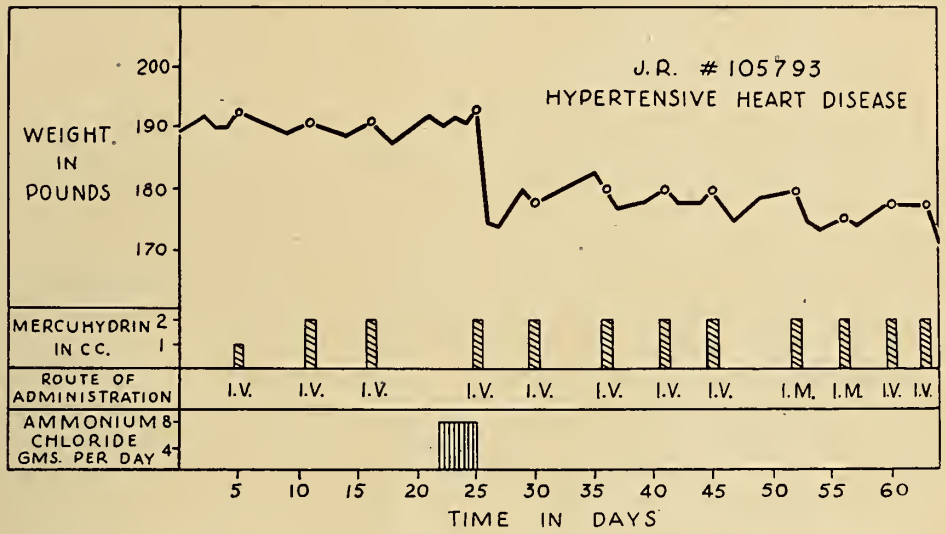


Fig. 2. Diuretic effect in pounds of weight loss following ammonium chloride and mercuhydrin.

of 34 pounds (15.5 Kg.) following repeated injections of mercuhydrin during a period of fifty-five days. In this patient, there was a gradual increase in weight during the first five days of hospitalization, before the mercurial diuretic was given.

The results obtained with mercuhydrin preceded by a period of ammonium chloride therapy are summarized in Table II. The weight loss obtained with the 1 c.c. dose given intramuscularly was 4.66 pounds (2.1 Kg.); with the same dose given intravenously, the average weight loss was 5.8 pounds (2.6 Kg.). The average weight loss with the 2 c.c. dose given intramuscularly was 11.25 pounds (5.1 Kg.); with the same dose given intravenously the average weight loss was 8.27 pounds (3.8 Kg.). These data indicate that the diuretic effect was consistently greater in those instances where ammonium chloride preceded the mercurial diuretic than with the mercurial diuretic alone, and with the preliminary medication there were no instances of failure of diuresis. In general, the diuretic effect produced in patients with cardiac edema by ammonium chloride plus mercuhydrin was more than twice that which followed mercuhydrin alone. The patient J.R. (Fig. 2) with hypertensive heart disease illustrates this point. He was given a 1 c.c. dose and later 2 c.c. doses of mercuhydrin intravenously without weight loss. Ammonium chloride was then given for three successive days, followed by mercuhydrin on the morning of the fourth day, and a weight loss of 18 pounds (8.2 Kg.) occurred during the next twenty-four hours. Thereafter diuresis was

obtained in this case with 2 c.c. doses of mercuhydrin alone.

In Table III are summarized the results obtained following the intravenous and oral administration of mercupurin. This drug was given 91 times in doses of 1 c.c. intravenously and it produced an average weight loss of 2.93 pounds (1.53 Kg.). It was administered 141 times in doses of 2 c.c. and produced an average weight loss of 3.24 pounds (1.4 Kg.). When ammonium chloride was given as preliminary therapy, followed by mercupurin, the weight loss was at least twice that which occurred when the latter drug was used alone. Ammonium chloride, in doses of 8 gm. per day for three consecutive days preceding a single intravenous dose of 1 c.c. of mercupurin, was used on seventeen occasions and the average amount of weight loss was 5.7 pounds (2.6 Kg.). This same preliminary medication was used in nineteen instances preceding the single 2 c.c. doses of mercupurin, and the average weight loss which followed was 6.3 pounds (2.9 Kg.).

TABLE III. WEIGHT LOSS OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAVENOUS AND ORAL ADMINISTRATION OF MERCUPURIN.

AMMONIUM CHLORIDE GMS. 8 FOR 3 DAYS	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS OR DOSES	INJECTIONS SHOWING NO WEIGHT LOSS	AVERAGE WEIGHT LOSS IN POUNDS
NONE	1 CC. I.V.	91	15	2.93
	2 CC. I.V.	141	10	3.24
	5 TABS. ORAL	35	26	2.61
GIVEN	1 CC. I.V.	17	2	5.70
	2 CC. I.V.	19	1	6.30
	5 TABS. ORAL	21	9	3.46

The diuretic effects produced by mercupurin administered orally in a single dose of five tablets was less than either mercupurin or mercuhydrin given parenterally. There were thirty-five trials of mercupurin given by mouth, without preliminary ammonium chloride therapy, and the average amount of weight loss was 2.61 pounds (1.2 Kg.); in twenty-six of these thirty-five instances there was no weight loss following oral mercupurin. Mercupurin administered by the oral route, after a period of ammonium chloride therapy, on twenty-one occasions resulted in an average weight loss of 3.46 pounds (1.6 Kg.); in nine of these twenty-one trials there was no diuresis following oral mercupurin.

Toxicity

Mercuhydrin.—Pain at the site of the injection occurred in seven instances following 234 intramuscular injections. No areas of induration and no abscesses were observed with any of these injections. On several occasions during intravenous injections, extravasation occurred which caused moderate pain along the vein.

Urinary sediments were studied following 181 injections; an increase in the number of hyaline casts was found on seventy-four occasions. Renal function, as indicated by urea clearance tests, was determined before and after a series of injections of this new drug in ten patients. The blood nonprotein nitrogen was determined before and after the drug in fifty-four patients. These investigations revealed no evidence to indicate renal damage attributable to mercuhydrin. Although the number of patients thus studied is small, we find no evidence to indicate any significant renal damage. One patient, in whom a decrease in the urea clearance occurred, was known to have chronic nephritis, and the change in renal function was probably due to progression of the nephritis and not to any deleterious action of the drug. Another patient, a twenty-eight-year-old negro, with syphilitic aortic insufficiency in severe cardiac decompensation, was given mercuhydrin in the presence of hematuria. On the regimen of strict bed rest,

a salt-poor diet, and a maintenance dose of digitalis for five days, he gained 7 pounds in weight. Innumerable red blood cells were present in the urine on several occasions, but in view of the severity of the congestive failure it was decided to give a mercurial diuretic. Diuresis was effected immediately; the patient lost 18 pounds and hematuria disappeared.

Electrocardiograms were taken before and after mercuhydrin in forty cases. In none of them was there any lasting change in the electrocardiograms after several doses of this new drug. We have not attempted to investigate by electrocardiographic studies possible immediate or transitory effects upon the myocardium or the conduction system.

No significant hematological changes were detected in nineteen of twenty cases treated with mercuhydrin. In one patient there was a decrease of 5 gm. in the hemoglobin content. This man had received sodium thiocyanate at the same time mercuhydrin was given; therefore, we are unable to determine whether this drop in hemoglobin was due to either of the drugs or to some other factor.

One patient experienced precordial pain and anxiety immediately following an intravenous injection of 2 c.c. of mercuhydrin; this did not recur with subsequent injections of equal amounts of the drug by the same route. No deaths attributable to this mercurial diuretic occurred in this series of patients.

Mercupurin.—In the series of seventy-seven patients who received mercupurin none showed any evidence of local or general systemic reactions. During the course of this investigation, however, we observed one patient, not included in this study, who developed urticaria when given mercupurin but who tolerated mercuhydrin with no ill effects. Within ten minutes after a 1 c.c. dose of mercupurin given intravenously, she developed pruritic areas of urticaria. Subsequently, 1 c.c. and 2 c.c. doses of mercuhydrin administered intravenously caused no untoward reactions. It has been previously shown that a patient hypersensitive to one mercurial diuretic may take another with impunity.[8]

Discussion

The method of daily weights is a simple and fairly accurate means of following the diuretic effects of any preparation (see Goodman, Consaro and Stasey,[11] and Modell[14]). By waiting until the patient's weight becomes stable ("state of balance" of Goodman et al.[11]) before administering the diuretic, the error of attributing to the drug the diuresis due to bed rest, digitalis, and salt restriction is avoided.

The administration of ammonium chloride for forty-eight to seventy-two hours before the injection of mercurial preparations enhance their action.[7,13] In this study, the use of ammonium chloride was limited to those patients who failed to respond, or in whom diuresis was considered inadequate after the administration of the mercurial diuretic alone. The results summarized in Tables I and II, indicate that all patients with cardiac decompensation who had not experienced diuresis with mercuhydrin alone, experienced a significant diuresis by this method.

It appears that mercuhydrin is as effective when given intramuscularly as when given intravenously. In some instances, as shown by a comparison of Tables I and II, this drug produced a slightly greater weight loss when given intramuscularly.

Modell, Gold and Clarke[15] recently reported a well-controlled comparative study of the local irritant effects of intramuscular injections of mercuhydrin and mercupurin. The majority of their patients claimed that mercuhydrin caused the least discomfort. Although our studies are not well controlled in this respect, we concur in the opinion that mercuhydrin is less irritating locally than mercupurin when administered intramuscularly.

A number of immediate deaths have been reported following the intravenous injection of diuretics.[1,2,9,18,19,21] None occurred in this study. This danger should not be minimized, but the number of serious reactions reported is exceedingly small as compared to the large number of injections of mercurial diuretics given. In this general hospital, an average of 1,500 ampules of mercupurin are given per year, and during the past six years not a single instance of sudden death attributable to mercurial diuretics has occurred. As was pointed out by Wexler and Ellis,[21] no fatalities have been reported after the intramuscular injection of mercurial diuretics. In view of the fact that mercuhydrin is associated with slight local irritation at the site of intramuscular injection and is equally effective when given by this route, it offers a definite advantage over the mercurial diuretics now in use.

Throughout this study, attention has been focused on any possible renal damage which might result from the use of mercuhydrin. There was an increase in hyaline casts in the urinary sediment following 40 per cent of 181 injections in which the sediment was studied. A review of the American literature has revealed only an occasional report in which mention is made of the occurrence of casts in the urine of patients treated with mercurial diuretics. None of these authors attributed any significance to this finding. In this study albuminuria did not occur; the nonprotein nitrogen values of the blood remained normal or, if elevated, returned to normal with the loss of edema, and there was no impairment of urea clearance attributable to mercuhydrin. These facts are interpretcd as indicating that this new mercurial produces no measurable toxic effects on the kidneys.

The 1 c.c. and 2 c.c. doses of mercuhydrin were chosen in this study because the mercury content was comparable to the usually recommended doses of organic mercurial diuretics in common use. The results, summarized in Tables I and II, indicate that a more adequate total diuresis was obtained with the 2 c.c. doses than with the 1 c.c. doses. When mercuhydrin was preceded by ammonium chloride, there were no failures of diuresis with either dose of mercuhydrin. However, the loss of weight in twenty-four hours following the larger dose was frequently so great as to be alarming, and often these patients appeared exhausted for twenty-four hours or longer. This was due principally to the rapid loss of the large amount of fluid and the exertion incident to this massive fluid excretion. In view of these considerations it is recommended that mercuhydrin be given in 1 c.c. doses when it is preceded by ammonium chloride, or 2 c.c. doses when given without this preliminary preparation.

Summary

The diuretic and toxic properties of a new organic mercurial N-(3-methoxy-2-oxymercuriopropyl)N-succinylurea, *mercuhydrin,* were studied in 129 patients with edema. These results were compared with those obtained when mercupurin was administered parenterally to fifty-two patients and orally to twenty-five patients. The amount of weight lost in twenty-four hours after the administration of the diuretic was taken as the measure of the diuretic effect.

Mercupurin, in 1 c.c. doses intravenously, produced an average weight loss of 2.93 pounds; in 2 c.c. doses, it produced an average weight loss of 3.24 pounds. Mercuhydrin, intravenously in 1 c.c. doses, produced an average weight loss of 2.26 pounds; in 2 c.c. doses, it produced an average weight loss of 3.23 pounds. Mercuhydrin was equally as effective when given intramuscularly as when given intravenously. When ammonium chloride was given as preliminary therapy, the weight loss following both mercuhydrin and mercupurin was at least twice that which occurred when the latter drugs were used alone.

Mercupurin administered orally (single dose of 5 tablets) was less effective than either mercupurin or mercuhydrin given parenterally. Oral mercupurin preceded by ammonium chloride produced a diuresis equivalent to mercupurin or mercuhydrin given parenterally without ammonium chloride. No significant toxic effects were observed in any of the cases studied.

The authors are grateful to Dr. Gordon B. Myers and and Dr. Carl A. Moyer for their helpful suggestions in this study.

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The Biomechanical Treatment of 100 Fractured Legs

By A. Jackson Day, M.D.
Detroit, Michigan



ALTHOUGH THE GENERAL principles of treatment of fractures of the leg are well known, it is seldom possible under civilian circumstances to treat a large number of fractures over a short period of time. The author wishes to review some of the fundamental surgical and physiological principles of fracture recognition and treatment in a study of 100 fractured legs which he treated from September, 1943, to September, 1944. This group does not include the few fractures of the shaft of the fibula without fracture of the tibia, nor the many fractures of the tibia and fibula involving the ankle joint or the knee joint. The 100 fractured legs occurred in trainees. Skiing was the most common cause of injury; others resulted from accidents in military vehicles, civilian automobiles, aeroplane crashes, falls from horses, falls on icy roads and rocky terrain. None of the injuries were contaminated by soil favoring anaerobic wound infection. All of the injured men were admitted to the hospital for definitive treatment as fresh fractures without delay, infection, shock, or surgical meddling. None of these soldiers were combat or evacuation casualties. Old fractured legs with nonunion, mal-union, delayed union, osteomyelitis, circulatory insufficiency and contractures also were admitted for treatment but they were not included in this report of 100 which were recent or fresh injuries. Table I indicates the number of simple and compound fractures included in this report.

TABLE I. 100 FRACTURES OF THE TIBIA

Simple		78 cases.
	Open treatment	33 cases
	Closed treatment	45 cases
Compound		22 cases.

Formerly Major, Medical Corps, A.U.S. This article represents work done at Fitzsimons General Hospital, Denver, Colorado, and has been approved for publication by the office of the Surgeon General. Dr. Day is now on the staffs of United States Veterans Hospital and St. Joseph's Mercy Hospital, and is on the orthopedic staff of Harper Hospital, Detroit, Michigan.

When it became apparent that a large number of fractured legs would probably reach this hospital for treatment, the author reviewed the biomechanics of treatment of the fractured tibia with the purpose of setting up a standard method of procedure to be used in subsequent cases. A fracture is not only a break in the continuity of a bone but also a break in the neuro-muscular, circulatory, articulating and gliding mechanisms of the extremity, not infrequently associated with shock and other serious injuries and diseases. In the treatment of a fracture five points or "R's" are important: Recognition, Reduction, Retention, Restoration of function, and Return to work. In the recognition of a fracture it is essential that the entire bone is included in the x-ray, and in the case of the tibia this should include the ankle and knee joints, since disturbances in the region of the joints may well cause more late disability than any disturbance related to the primary fracture. After reduction is obtained, retention must be absolute, and if this cannot be obtained with the immobilization alone, then additional types of fixation must be used. The restoration of functions begins within a few days after reduction of the fracture and is not delayed until all external fixation is removed. Nonunion may be prevented by recognition of all of these factors at the time of the initial treatment. Soft tissue interposition is evident when the fracture cannot be reduced or, if reduced, cannot be retained. Even without soft tissue interposition there may be failure of good reduction. In some instances, reduction is obtained but there is incomplete bony contact, and this failue of absolute retention leads to nonunion. Traction and distraction may prevent good bony contact and are frequent causes of nonunion. Although it does not have to be severe, circulatory interference may be responsible for nonunion, particularly in the tibia where poor overlying skin and scar tissue may inhibit the normal course of union. In addition, meddlesome surgery may be as prominent in the production of nonreunion as the factors just mentioned.

Treatment of Simple Fracture

In simple fractures of the tibia, before definitive treatment is carried out, a few suggestions may be made regarding transportation. It is believed that a well-padded split plaster splint is the best method of transporting a fractured tibia. Pillow or blanket splints with fracture board reinforcement are,

TABLE II. RESULTS OF CLOSED TREATMENT OF FORTY-FIVE SIMPLE FRACTURES OF THE TIBIA BY MANUAL MANIPULATIVE REDUCTION WHEN NECESSARY AND PLASTER IMMOBILIZATION.

(The fibula was not fractured and provided a good internal splint.)

Bony union	45
Delayed union	3
Limitation of ankle motion	12

however, entirely satisfactory if transportation is over a short distance. Transfixion pins or wires purely for the purpose of transportation are contraindicated, as is a Thomas leg splint with ankle or shoe traction. In transportation of the fractured tibia, immobilization is more important than traction. In the definitive treatment of the fractured tibia, many simple fractures do not require manipulation. The position when first examined is often quite satisfactory, with good bony contact and with minimal if any angulation. If, however, there is displacement and angulation, manual manipulative reduction should be performed. It is unnecessary to use transfixion wires or pins for skeletal control unless there is extensive soft tissue injury from hemorrhage, bruises or other trauma. The os calcis should not be transfixed for prolonged traction because of the possibility of localized infection in the os calcis, which will require treatment long after the tibia has healed. Although this may not be common, it has been seen often enough to warrant a plea against its use. Following reduction, the leg should be encased in a plaster cast extending from the upper thigh to the toes. X-rays should be taken each week until there is no further danger of displacement. If good reduction and retention are not accomplished by these means, then open operation with internal screw fixation is indicated. A more detailed discussion of the treatment following application of a cast will be discussed later. The results of the closed treatment of forty-five simple fractures of the tibia are shown in Table II. Bony union was obtained in every case. Although there was some mild limitation of ankle motion in twelve cases at the time of release from the hospital, it is felt that this probably improved in the following year. It is obvious that late follow-up of military cases is difficult to obtain.

In comminuted fractures of the proximal third of the tibia, it is believed that neither immobilization nor open reduction are procedures of choice because of residual limitation of motion in the knee joint. In these cases, skeletal traction through the distal end of the tibia and the use of an army leg splint with a knee flexion attachment provide a means of beginning motion in the knee joint a few days after injury and prevent the residual limitation of motion. By careful attention to knee motion, such patients obtain a full range of joint motion.

Open Reduction and Screw Fixation of Simple Fractures

If good reduction is not obtained by manipulation, and if immobilization in a plaster cast does not retain the reduction, open reduction is indicated in simple fractures of the tibia. In planning a program for the treatment of these fractures, various types of internal fixation were studied. It is believed that metal plate fixation does not meet the biomechanical requirements in fixation of the fractured tibia.

Metal plate fixation of the tibia (Fig. 1) is condemned in simple fractures for many reasons. Plates are unnecessary because screws alone provide better fixation. In addition, because of the thin soft tissue covering on the tibia, plates favor delayed wound healing. When plates are applied, it is practically impossible to maintain hairline-tight approximation of the fractured bone ends and, consequently, the bone ends are actually held apart thus favoring delayed and non-union. Mechanically, screw fixation alone draws the fractured bone ends together and aids approximation rather than prevents it. In a few instances when a plate is indicated, as in a very comminuted fracture, it is better to use a biological plate, that is, an autogenous bone graft rather than the nonbiological metal plate. This criticism of metal plates is limited in this study to fractures of the tibia, and no discussion relating to their use in other bones will be made in this paper. Kirschner wires, metal bands and pins of various types are also condemned in the treatment of simple fractures for the same reasons.

Operative Technique

Asepsis is respected at all times, and a very careful skin preparation is used prior to surgery. The soft tissues are respected and considerable care taken to prevent damage during surgery. In the elimination of the skin, towels are sutured to the subcutaneous tissue as a simpler and more effective means than the use of various clips. After the periosteum is incised the fracture site is exposed



Fig. 1. This case, although not a part of this series of fractures, represents a technique which is condemned.



Fig. 2. An oblique fracture of the tibia, reduced and fixed by three screws, shows solid bony union five months after injury.

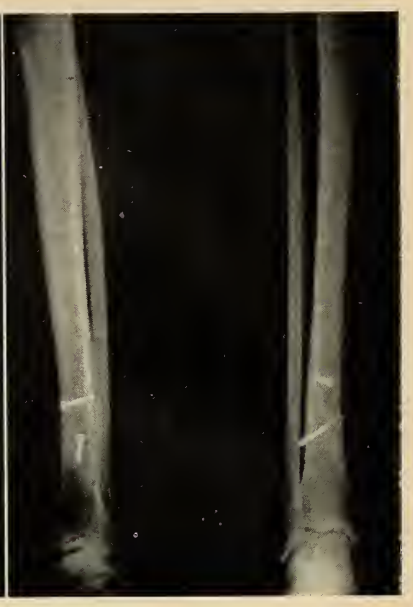


Fig. 3. Comminuted ski fracture of tibia four months after injury.

by subperiosteal stripping. Soft tissue interposition, consisting of fascia, muscle, and blood clots, is removed. If considerable traction is needed, a webbing strip is placed about the patient's ankle and foot and around the surgeon's pelvis, and provides an easy means of reducing the fracture. With the aid of bone clamps, hairline-perfect anatomical reduction is obtained, and is maintained either with bone clamps or with two or more large Kocher clamps. The number of screws and the position of the screws is determined by the stresses required in reducing the fracture. It is important to use the proper size drill, gauge 35, 36, or 37, whichever is smaller than the bore of the screws. Two, three, or more screws, either Townsend and Gilfillan, or Sherman SMO steel, or vitallium screws, are used. The length is chosen carefully so that the screws protrude through the opposite cortex but not too far. On the subcutaneous surface of the tibia the screw heads are countersunk to avoid irritation of the skin. The wound is closed primarily and no drains are used. Following surgery, a long leg plaster cast is applied with the knee slightly flexed and with the ankle and foot in the neutral position. This cast is split longitudinally to allow for edema.

Edema may have disastrous effects, and considerable care, therefore, is taken in its prevention. Edema is biological glue, and prolonged edema causes fibrosis. The extremity is elevated on a wooden elevator covered by a soft pillow, so that the foot is higher than the knee and the knee is higher than the heart. Thrombophlebitis is prevented by encouraging early active exercises of the toes, the thigh muscles of the injured leg, the opposite leg, and of the other body muscles in general. Group exercises should be organized on the fracture wards for this group of patients. In the application of plaster casts, pressure neuritis of the common peroneal nerve must be prevented by adequate padding in the region of the sesamoid bone in the external head of the gastrocnemius muscle, and about the head and neck of the fibula. Proper padding and the generous application of lanolin over the heel, Achilles tendon, and metatarsal heads, prevents pressure necrosis of the skin. Plaster casts should be trimmed so as to allow full motion of the toes. The toes should be mobilized just as assiduously as the fingers are mobilized in the Colles fracture of the wrist, to prevent later contractures and deformities of the toes when a shoe is applied to the foot. In many cases, circulatory insufficiency of the extremity will develop when the patient becomes ambulatory after surgery, and again later when the paster cast is removed. If edema appears, there should be continuous elevation until the edema subsides. After this, such patients should be placed on an "edema program," consisting of intermittent dependent position of the



Fig. 4. A long oblique and spiral fracture held by screw fixation six months after injury.



Fig. 5. Spiral fracture, lower tibia, three months after injury, at which time the patient was full weightbearing without brace or crutches.

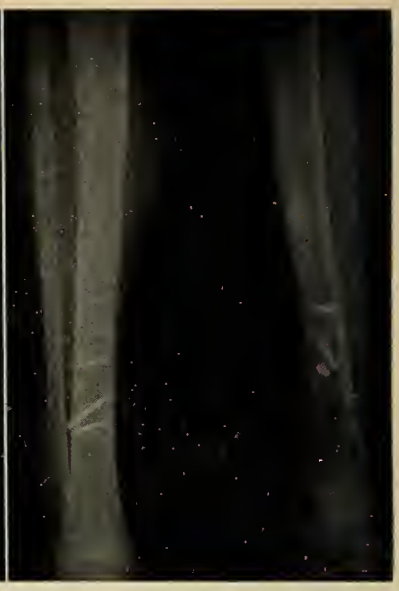


Fig. 6. Oblique fracture shows union five months after injury.

extremity for one minute each hour during the first day, two minutes each hour the second day, and so on, with elevation of the extremity the remainder of the time and with an increase in the dependent period more rapidly after seven or eight days. Active exercises started the first postoperative day will aid circulatory function. In all of these cases, intermittent partial graduated weightbearing, in a long leg plaster walking cast with a rubber heel attached, is begun between the third and fourth postoperative week (see Fig. 7). It is believed that union is stimulated by this early weightbearing and exercise. Between the sixth and eight postoperative weeks, the long cast is changed to a short walking plaster cast, and this is continued until there is x-ray and clinical evidence of bony union. All splints are then discarded at between three and six months. It is not always easy to determine the presence of firm union, and the clinical test is just as important as the x-ray study, for with a hairline reduction there is frequently no x-ray evidence of peripheral callus formation. After the plaster splint is discarded, knee, ankle, and subastragalar joint motion should be restored by intelligent physical exercise, taking advantage of physiotherapists, occupational therapists for specific function, and industrial therapy.

The results in thirty-three cases treated by open reduction and screw fixation are shown in Table III. Bony union was obtained in every case, and

TABLE III. RESULTS OF OPEN REDUCTION AND SCREW FIXATION OF THIRTY-THREE SIMPLE FRACTURES OF TIBIA

Infection	None
Sinuses	None
Thrombophlebitis	None
Persistent edema	1
Delayed union	None
Non-union	None
Bony union (3 to 6 months)	33
Mild limitation of ankle motion	5
Painful scar	None
Deaths	None

there was no infection and no delayed union. There was some mild limitation of ankle motion in five cases but late follow-up was not obtained. Figures 2 through 7 demonstrate the end results of cases in this group.

If open reduction is necessary and the fracture is transverse, making it difficult to obtain good fixation by screw fixation, it is felt that a sliding autogenous bone graft with screw fixation is indicated. All illustration of this is shown in Figure 8. The author feels that the morbidity associated with such a procedure is no greater than that in open reduction alone, and that it more properly meets the biomechanical requirements than other methods.

Compound Fractures

In the treatment of compound fractures, the same biomechanical principles described under simple fractures is indicated. The cleansing of the wound both mechanically and by irrigation with warm saline solution is just as important as



Fig. 7. A spiral fracture of the tibia shows treatment by open reduction and fixation of two screws immobilized in a walking cast with heel attached, in which weightbearing was begun three weeks after operation.

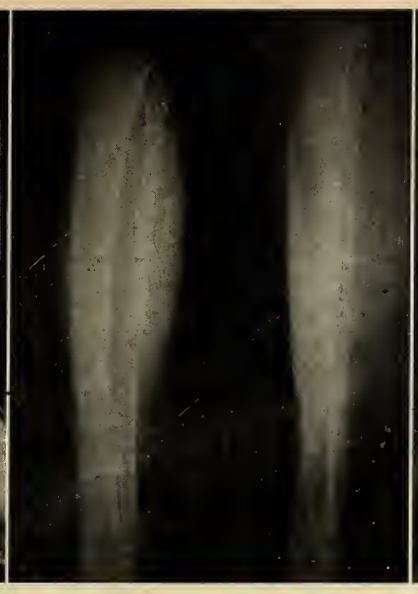


Fig. 8. Transverse fracture of the tibia, treated by initial sliding bone graft and screw fixation, shows solid bony union five months after injury.



Fig. 9. Compound fracture of the tibia, treated by debridement, reduction and fixation by a Kocher clamp held in place by tying the handles with cotton hernia tape. The clamp was removed after six weeks; the wound healed in two months, and solid bony union was obtained at five months.

the excision or debridement of all devitalized tissue. Here again, anatomical reduction of the fracture is essential. This may be maintained either with an external splint, with transfixion screws, transfixion wires or pins, Kocher clamps, and in some instances, metal plate and screws. If good reduction cannot be obtained by external means, then internal fixation is necessary. In Figure 9, a compound fracture of the tibia is illustrated. This was reduced and held by one Kocher clamp which was allowed to remain in place and was held by tying the handles with cotton tape. After six weeks the clamp was removed; the wound healed rapidly, and solid bony union with perfect reduction was obtained after four months. Vaseline gauze is laid in the wound to maintain an open wound, but it should not be packed into the wound, spreading the tissue apart. In this series, chemotherapy, consisting of various sulfa drugs and penicillin, was used and either tetanus antitoxin or a tetanus toxoid booster dose was given. Bacteriological studies were routine. If there is no evidence of infection manifested either by fever or suppuration, early closure of the wound after four days is indicated. Such procedures may be carried out either by primary suture or by skin grafting. In this way, a compound contaminated anaerobic wound with bone deformity is transformed into a clean open aerobic wound with accurate anatomical reduction, and secure fixation of the fracture and early closure of the wound can usually be performed. In Table IV will be found the results of twenty-two compound fractures of the tibia. Although there was no chronic osteomyelitis, there was local infection in four cases which subsided after several months. There was some mild limitation of ankle motion, chiefly because some of these patients required longer immobilization than was the case in the simple fractures.

TABLE IV. RESULTS OF TWENTY-TWO COMPOUND FRACTURES OF THE TIBIA

Chronic osteomyelitis	None
Local infection	4
Mild limitation of ankle motion	8
Bony union	22

Summary

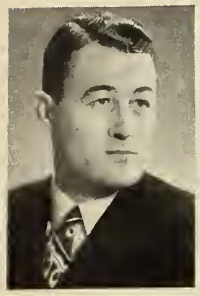
The basic principles of fracture treatment are reviewed in a study of 100 fresh fractures of legs. This group, although seen under military circumstances, is comparable to the fractured legs seen in civilian life. The results of treatment of these cases are explained by:

1. Good reduction
2. Good retention of reduction
3. Sound biomechanical principles of therapy.
4. Absence of meddlesome surgery.

The author wishes to express his appreciation for the advice, suggestions, and opinions given to him by Dr. Vernon L. Hart, Minneapolis, during the period of investigation and the preparation of this article. In addition, appreciation is expressed to Dr. Udell M. Gessel, Ann Arbor, Michigan, for his aid in the management of these cases, many of which were treated by him.

Preoperative Preparation of Patients with Carcinoma of the Colon

By John C. Scully, B.S., M.D., F.A.C.S.
Chicago, Illinois



SURGERY FOR CARCINOMA of the colon has recently been approached with less apprehension. Three factors have contributed to the lowered mortality and morbidity in the treatment of carcinoma of the large bowel. They are, mentioning them in the order of their importance, the ability to render the bowel contents sterile by the use of succinylsulfathiazole or phthalylsulfathiazole, the detection of anemia and evaluation of serum protein deficiency, and their correction by multiple transfusions preoperatively, during operation and postoperatively.

We have selected four cases of carcinoma of the colon, each at different sites in the colon, to illustrate how these patients did comparatively well after rather formidable procedures.

Case 1.—Mr. H. D., aged sixty-four, a farmer, was admitted to St. Joseph's Hospital in Menominee, Michigan. The history revealed diarrhea with red blood in the stools and intermittent cramp-like abdominal pain three to four days prior to admission March 18, 1945. This patient had lost an undetermined amount of weight.

Physical examination revealed nothing abnormal except for moderate distention and a tender, firm, moveable mass in the lower left quadrant.

Laboratory Examination: Red blood count, 3,500,000: white blood count, 11,000; hemoglobin 64 per cent; differential, normal; and total serum protein, 5.4 mg. Stools showed four plus blood present on gross examination and chemical test. X-ray examination of the colon revealed an annular filling defect at the rectosigmoid (Fig. 1).

This patient's serum protein deficiency was corrected by a preoperative transfusion of 500 c.c. of citrated blood. Amino acids were given orally, and at the time of operation, his anemia and serum protein deficiency had been corrected. Preoperatively, he was placed on succinylsulfathiazole for a week. At operation, the carcinoma was resected and the cut ends of the colon were exteriorized as a Rankin obstructive resection. The clamps were removed after four days, and the spur was cut down at the end of the first week. He had a well-functioning colostomy at the time he left the hospital two weeks after operation, and the colostomy was closed two months following his initial hospitalization.

Since operation he has gained 20 pounds and has normal stools, and re-examination of the colon by x-ray reveals the lumen of the colon at the site of anastamosis to be adequate.

Case 2.—Miss L. W., aged fifty-eight, an office worker, was admitted to St. Joseph's Hospital, Menominee, Michigan, complaining of intermittent distention and cramp-like abdominal pain since November, 1945. In spite of this pain and moderate distention, she continued work until January, 1946, when she had an episode of severe cramp-like pain in the abdomen, marked distention, and repeated emesis. She was entirely afebrile during this period of obstruction.

Physical examination revealed nothing abnormal except for a moderate amount of distention which prevented palpation of any of the abdominal viscera or masses therein.

Laboratory examination: Red blood count, 4,100,000; white blood count, 9,850; hemoglobin, 68 per cent; differential, normal; and total serum protein, 5.8 mg. X-ray examination of the colon revealed an annular filling defect at the splenic flexure (Fig. 2). The obstruction at this point, however, was not complete, since a small amount of barium passed and was seen proximal to the point of obstruction. Since distention was present, she was placed on parenteral fluid, and a Miller-Abbott tube and Wagensteen suction were used to decompress her.

This patient was given a transfusion preoperatively and was placed on phthalysulfathiazole and given amino acids in her parenteral fluids. At the time of operation, her anemia was corrected, the total serum protein was normal, and she was afebrile. The splenic flexure was resected with the carcinoma and the cut ends of the bowel were exteriorized as a Rankin obstructive resection in the upper left quadrant. She was given 500 c.c. of blood during the operation and another 500 c.c. the afternoon following surgery. Her clamps were removed on the fourth day and the colostomy spur was cut down the end of the first week. The colostomy was closed approximately two months later.

Since operation, she has gained 25 pounds, has had no symptoms referable to her initial complaint, and has returned to work.

Case 3.—Mr. C. B., aged seventy, was admitted to Marinette General Hospital on May 1, 1946. For a year prior to admission, this patient had mild spells of cramp-like abdominal pain with very moderate distention. He had not consulted a doctor until two days prior to admission, when, in addition to the cramp-like pain and distention, he developed red blood in the stools.

Physical examination was normal except for a moveable, firm, abdominal mass, palpable just above the umbilicus. This was not particularly tender.

From the Department of Surgery, Medical School, Northwestern University.

Laboratory examination: Red blood count, 3,850,000; white blood count, 7,500; hemoglobin, 64 per cent; differential, normal; and total serum protein, 5 mg. X-ray examination of the colon (Fig. 3) revealed an indefinite filling defect in the mid transverse colon. This filling defect corresponded to the position of the abdominal mass.

Preoperatively, the patient was prepared with phthalylsulfathiazole and parenteral amino acids. The patient was given 500 c.c. of blood preoperatively, and during operation was given another 1,000 c.c. At operation it was found that the carcinoma seen on the x-ray in the mid transverse colon had penetrated the upper bowel wall and a walled-off sinus was attached to the greater curvature of the stomach. There were nodules on the stomach wall at this point and the attachment of the



Fig. 1. Case 1. Carcinoma of the rectosigmoid.

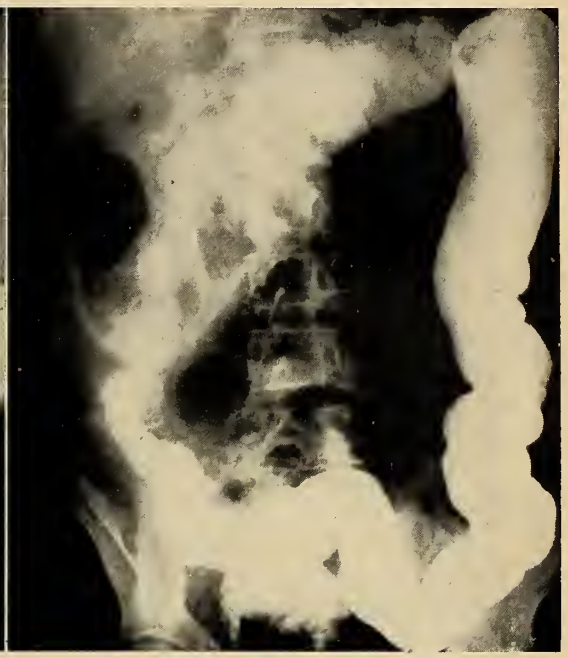


Fig. 2. Case 2. Carcinoma of the splenic flexure.

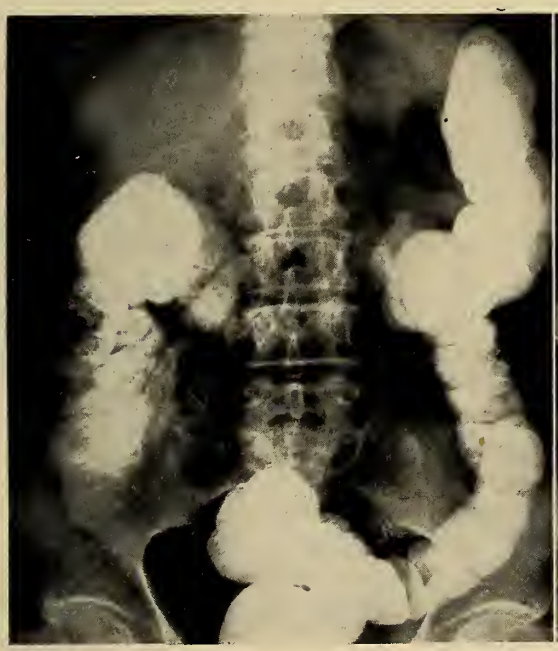


Fig. 3. Case 3. Carcinoma of the transverse colon.

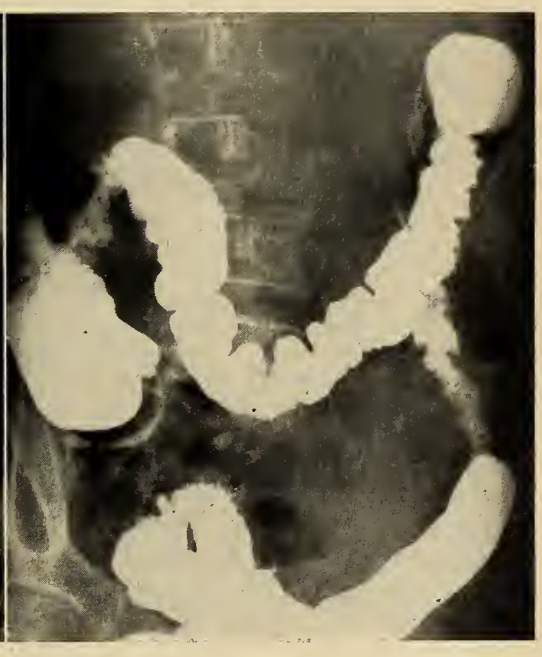


Fig. 4. Case 4. Carcinoma of the ascending colon.

sinus to the stomach was quite firm. Complete resection of the transverse colon was done, followed by a resection of a large V-shaped wedge of the greater curvature of the stomach bearing the contiguous metastasis. The lining of the stomach was explored and found not to be involved. The stomach was then closed, and the hepatic flexure and splenic flexure of the colon were mobilized, and the resected ends of the colon were brought out in the midline as a Rankin obstructive resection. Next, the cecum was freed and a Witzel cecostomy performed, and the catheter was brought out through a stab wound in the right flank.

In spite of the extensive surgical procedure, this patient stood the operation well. However, on the second postoperative day he developed a temperature of 101.5°. Sodium sulfathiazole was given parenterally with his infusions and the temperature subsided. On the third day, after removing the Wagensteen tube, the patient began to vomit, so it was necessary to reinsert the tube and leave it in place for a week. Following this, it was removed and he took food without distress. The clamps were removed from the colostomy after four days and at the end of one week this patient's spur was cut down and he had a well-functioning colostomy. At no time was there any distention. The cecostomy tube was removed in ten days. We plan to close this patient in about two months from the time of operation.

We had originally intended to do a primary anastamosis following the resection of the carcinoma of the transverse colon in this case, but due to the extensive involvement of the stomach, we deemed it inadvisable to take the additional risk which would have been incident to primary anastamosis.

Case 4.—Mr. C. L., aged seventy-six, a night watchman, was admitted to Augustana Hospital, Chicago. This man had absolutely no bowel symptoms, but did have a very marked anemia and weight loss of about ten pounds. X-ray examination (gastro-intestinal series) following his first office visit, August 14, 1945, revealed a duodenal ulcer. It was assumed that his anemia was secondary to the bleeding from his ulcer. The patient was placed on antianemic therapy and medical ulcer management. His anemia was corrected and he felt somewhat better, but shortly after the first of the year, and following a recheck on his blood count, it was noted that his previously normal count had markedly diminished and the red blood count was 2,890,000; white blood count, 7,600; and hemoglobin, 64 per cent. His total serum protein at this time was 4.2 mg. It was evident that, since there had been no melena or hematemesis, there was some other cause for this rapidly developing anemia in spite of therapy.

Physical examination was entirely normal except for marked pallor and evident weight loss. No masses were palpable in the abdomen.

Laboratory examination: X-ray examination of the colon (Fig. 4) revealed a filling defect in the ascending colon.

This patient was prepared with succinylsulfathiazole orally, prior to operation, and three blood transfusions. He was also given parenteral and oral amino acids. At the time of operation, February 15, 1946, his blood picture and total serum protein were normal. At operation, the distal 4 inches of the ileum, entire right colon and half of the tranverse colon were resected. The resected ends of the colon were brought out in the upper right quadrant as a Rankin obstructive resection. The patient was given 1,000 c.c. of blood during the operation and another 500 c.c. the afternoon following surgery. His postoperative course was entirely uneventful, and at the end of the fourth day the clamps were removed and he had a well-functioning colostomy. The spur was cut a week postoperatively.

His colostomy was closed April 1, 1946, and since that time he has had no bowel symptoms and has gained 19 pounds in weight, and in spite of his advanced years, he is again seeking employment as a night watchman.

In each of the above cases there was anemia and total serum protein deficiency which was corrected preoperatively. Each patient was prepared with either succinylsulfathiazole or phthalylsulfathiazole and, with the exception of the one case in which the stomach was involved, the temperature curve postoperatively did not go above 100°. There was soiling of the peritoneum in each of these cases, particularly in Case 3. We attribute this lack of postoperative fever and distention directly to the sterilization of the colon contents with succinylsulfathiazole or phthalysulfathiazole. This opinion is based on comparison of these cases with similar cases of carcinoma of the colon in which the same technique was used and in which sulfaguanidine or other older chemotherapeutic agents were used in preoperative preparation.

In accordance with recently re-emphasized principles regarding the early ambulation of surgical patients, all of these patients were gotten out of bed before the end of the first week, and it seemed to us that they were markedly less asthenic than similar cases in which the serum protein deficiencies had not been corrected or in which their evaluation had been altogether neglected as in previous years.

Summary

Four cases of carcinoma of the colon are presented, one case of carcinoma of the ascending colon, one case of carcinoma of the transverse colon, one case of carcinoma of the splenic flexure and one case of carcinoma of the rectosigmoid junction. Each case had demonstrable anemia and serum protein deficiency. Each case was prepared preoperatively by rendering the bowel contents sterile with phthalylsulfathiazole or succinylsulfathiazole, and correction of anemia and serum pro-

(Continued on Page 1635)

Editorial

A YEAR OF ACCOMPLISHMENT

The end of the year 1946 brings time for reflection. On the whole, it has been a year of advancement. As a Medical Society, and as a medical profession, we have made signal progress.

On the national level, the American Medical Association at its annual session adopted a plan of extended and modern public relations, approved a report on a survey of the whole organization by a nationally recognized firm, and appointed the Raymond Rich Associates as public relations counsel. The secretaryship and general managership were changed and the retiring Secretary, Olin West, M.D., was chosen as President-Elect. The Council on Health and Public Relations, the most active Council of the American Medical Association, was given specific and extended duties with definite objectives: to foster and promote nonprofit voluntary health insurance.

Our own State Society has secured an active public relations counsel, has again levied a special assessment for public relations and information, and has allocated most of the money to a very comprehensive and far-reaching program. We shall use radio, the press, personal contacts, speakers bureaus, guiding hands for the public school debate program, and various other means to give our message to the public.

HEALTH LEGISLATION

Nationally we have fended off temporarily the complete compulsory regimentation of the medical profession. The bureaucratic drive for compulsory health service spearheaded by Wagner, Murray, Pepper, and Dingell, and blessed by Truman, made a determined fight. Hearings were held on the two Wagner-Murray-Dingell Bills and on the Pepper super EMIC Bill in the Senate Committee on Education and Labor. Although these hearings were apparently staged for a purpose, they fell flat and the bills were not reported out of Committee. The opposition, while not given much of a hearing, was too widespread.

A strong factor influencing future action on these bills was the November election which must be interpreted as a public protest against regimentation. Medicine was not the topic of voting; regimentation in general was involved. The elected majority is not for regimentation, and these bills while still having powerful support will have less chance of enactment.

For the past generation, however, there has been a trend looking to various forms of social security. Vast numbers of the public are demanding that inasmuch as medical services are becoming more expensive, and necessarily so, there should be a way to provide these services in adequate measure without too great immediate personal expense. The Miners Union has already made a bargain with the government providing a generous fund for health services, and other unions are already making plans to get as much as Mr. Lewis did. They are not expecting to consider such funds as wage increase, but do demand them as their just due. This is an entirely new concept of employment, even though some employers have for years provided health services for their employes. Some have also included the families.

The profession has abandoned the condition where it gained the reputation of being opposed to all so-called "progressive" legislation. A college professor, in talking a few days ago, made the statement that the profession had bitterly opposed every form of advancement helpful to the people. The first step it opposed was the establishment of health departments. Then it opposed the work for tuberculosis, and other extensions of preventive measures for health prevention. He did not know that the Michigan State Department of Health was established at the insistence of the Michigan State Medical Society. Our public relations have been woefully weak.

But we have now a constructive program for the betterment of the general health of the people. By conference and by combined effort, thinking, and action we have suggested a legislative program which will provide adequate health care for those in every state who are not in position to provide it for themselves. Also this plan makes prepaid security available to all who wish to secure it. For those who do not wish to participate, there is no compulsion. For the medically indigent first class care is available, and the government is not assuming any new burdens. *We are sponsoring the Taft-Ball-Smith Bill,* which does not in any way regi-

ment medicine or health services. The Wagner-Murray-Dingell Bill we should not have to fight much more, and we will not if we get behind our own bill and push it to the limit—being *for something constructive*—not just opposition.

OUR RETURNED VETERANS

The year has seen the return to private practice of most of our soldier members. What we feared might be a problem in rehabilitation has proven to be just what it was after the first world war. The only problem was to get the men back and out of uniform soon enough. There was a demand for their services and a reluctance to let them even take refresher courses. Most of them have had enough of regimentation and are more than eager to re-enter private practice and work as their own bosses. There have been some scattered problems, the most serious one being the reluctance to practice in rural communities as before the war. These rural areas are having difficulty to get doctors. The only answer to such a problem is to make the practice conditions sufficiently attractive to secure doctors.

Senator Taft, in his bill, makes provision for tax-supported retainers in order to make the practice sufficiently remunerative. No doctor can stay in a communitly where he cannot make a reasonable living, no matter what the need for his services.

MICHIGAN MEDICAL SERVICE

Our experiment in bringing good medicine to the public on a prepaid basis—thus relieving the catastrophic effects of serious illness—has progressed beyond our fondest dreams. We have brought professional services to hundreds of thousands of persons. In doing so, we have an organization with almost a million dollars of resources and reserves, instead of the sad picture of a few years ago when we might have closed shop.

The principle was and is right, and the experience gained must help us in problems to come that may tax our ingenuity to the utmost. No one can foretell the future, but modern American medicine with its yen to give the best possible medical service, and with its added business standards, will foresee and meet future trends. We need not fear too drastic changes in our modes of practice if we use the experience, the know-how, and the ability to lead in any changes which may be forming; we must help do the forming of new plans.

Bearing these things in mind, we fondly anticipate a new year not only with its problems, but with its satisfaction in the consciousness of things well done.

SCHOOLS FOR MEDICAL ASSOCIATES

The Michigan State Medical Society Commission on Health Care at the eighty-first annual session of the Michigan State Medical Society on September 22, 1946, presented a challenging report to the House of Delegates. It was too voluminous to be included in the minutes and too valuable to be lost there in fine print. We have selected this report to appear among the front pages of The Journal in the place usually occupied by medico-economic problems. We hope those members who did not hear the report will find time to read it (See page 1562).

The Commission has proposed plans looking to the preservation of the medical profession, and the utilization of many skills useful for the relief of illness or disability which by their very nature the doctor of medicine sometimes leaves to others. The experience of the past generation or two is that valuable fields of therapeutics are invaded by poorly trained personnel and are gradually lost to us, or at least alienated from us. Some of the cults have built their philosophy upon neglected activities known to the profession but not generally used sufficiently to hold them in line.

The Commission has outlined courses of study, plans and places for that study which, if adopted, will make available in a practical form services and skills now difficult to find when needed. There is a dearth of trained medical men for the tasks now demanded. They are naturally devoting themselves mostly to the more technical methods and more needful treatments and are inclined in some instances to leave the simpler but also useful services to anyone who will attempt them. By careful training and skillful use, controlled and recognized, much can be done to extend the services of the doctor of medicine, and in a measure piece out his time by his directing others, who have been trained, to give the needed services to awaiting patients under direct medical supervision.

This proposal should have been made, and in a measure was made thirty years ago, but was acted upon only in isolated places with disastrous results. Let us not miss the ball again.

TONSILLECTOMIES AND POLIOMYELITIS

EDITORIAL COMMENTS ON this subject in the September JOURNAL were based specifically upon the edict of various health authorities against the performing of tonsil operations during the season of greatest morbidity from poliomyelitis. The edicts from our State Health Department had been in effect two or three years cautioning that recent operations on the tonsils seemed to predispose to poliomyelitis invasion. This past summer the State Health Department did not issue that warning, but the Detroit Department of Health did. This all provoked some questions, which we propounded in a hope of finding whether there are sufficient grounds for the prohibition of tonsil surgery during the four summer months when that surgery has been most prevalent because of school vacations.

In our department of "Communications" (page 1656), we are publishing in full the answer received from Franklin H. Top, M.D., of the Detroit Department of Health. If we are able to interpret the facts given by Dr. Top, the prohibition against tonsillectomy should have been not against the performance during the four summer months, but against the performance of tonsillectomy at all. It seems that in general his cases of poliomyelitis occurred in tonsillectomized patients at any time in life, and not recent ones. We believe this study should be continued by all means, but we are not yet ready to give up the known good that does result from well-performed and selected tonsillectomies. The numbers of these operations done, and the vast numbers of the population who have had their tonsils removed far outbalance the small number of cases of bulbar poliomyelitis.

We are asked what we would tell the public with this information in mind. Our plan of procedure will continue to be, as it has been for several summers, to put the argument squarely up to the families. We have found that they choose wisely.

STUDY OF CHILD HEALTH SERVICES

THE AMERICAN ACADEMY of Pediatrics has undertaken a study of Child Health Services throughout the United States. In Michigan, the Michigan Branch has undertaken that study by means of a questionnaire, as mentioned in these pages (July, 1946, page 932), which will make another first for Michigan Medicine. In order to complete the survey and the report, it is necessary that all members return the questionnaire. If you have lost or misplaced yours, another copy may be obtained by writing to the State offices at 419 West High Street, Jackson, Michigan. This is a study by the *medical doctors* of Michigan to find out what our medical problem is and to determine how that problem can best be answered. To make the study complete, won't you please help?

ON THE RUN

Suspect allergy when all the paranasal sinuses are hazy to transillumination and x-rays.

• • •

Fever found in heart failure is due to the slowed velocity of the peripheral circulation which is insufficient for adequate elimination of heat from the body surface.

• • •

Lack of oxygen causes increased permeability of blood capillaries all over the body.

• • •

Structural similarity does not mean functional identity.

Selected by W. S. REVENO

HOSPITAL COSTS

In Michigan salary levels constitute most of hospital costs. The average pay roll per patient day actually is $6.55 of the total $11.10 total; 59 per cent of the total expenditures.

Michigan ranks second to California which is highest, $12.85, of which $7.02 is salary; 54.5 per cent.

—Editorial, *Hospitals,* September, 1946

CARCINOMA OF THE COLON

(Continued from Page 1632)

tein deficiency were accomplished by multiple blood transfusions and parenteral and oral amino acids.

Conclusions

Results suggest that preoperative preparation of patients with carcinoma of the colon by the above-outlined methods offer the patient greater postoperative comfort and safety.

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XIII. Elections
(To appear in January 1947 issue)

XIV. Adjournment

MICHIGAN STATE MEDICAL SOCIETY

Eighty-First Annual Session

PROCEEDINGS OF THE HOUSE OF DELEGATES

Book-Cadillac Hotel, Detroit, Michigan

Sunday Evening Session

September 22, 1946

The first meeting of the 1946 House of Delegates of the Michigan State Medical Society was held in the Book-Cadillac Hotel, Detroit, at eight-twenty o'clock, P. L. Ledwidge, M.D., Speaker of the House, presiding.

THE SPEAKER: The House will please come to order. Is the Chairman of the Committee on Credentials ready to report?

I. Record of Attendance

COUNTY	DELEGATE	MEETING 1st	2nd	3rd	4th
1. Allegan	E. B. Johnson	x	x	x	x
2. Alpena-Alcona-Presque Isle	W. E. Neshitt	x	x	x	x
3. Barry	A. B. Gwinn	x	x	x	x
4. Bay	R. C. Perkins	x	x	x	x
	W. S. Stinson	x	x	x	x
5 Berrien	D. W. Thorup	x	x	x	x
6. Branch	H. J. Meier	–	x	x	x
7. Calhoun	C. W. Brainard	x	x	x	–
	B. G. Holton	x	x	x	–
8. Cass	S. L. Loupee	x	x	x	x
9. Chippewa-Mackinac	B. T. Montgomery	–	x	x	x
10. Clinton	T. Y. Ho	x	x	x	x
11. Delta-Schoolcraft	A. H. Miller	x	–	x	x
12. Dickinson-Iron	D. R. Smith	x	x	x	x
13. Eaton	G. C. Stucky	x	x	x	–
14. Genesee	A. H. Kretchmar	x	x	x	x
	J. E. Livesay	x	x	x	x
	A. C. Pfeifer	x	x	x	–
	Alvin Thompson	x	x	x	x
15. Gogebic	D. C. Eisele	x	x	x	x
16. Grand Traverse-Leelanau-Benzie	R. T. Lossman	x	x	x	x
17. Gratiot-Isabella-Clare	M. G. Becker	x	x	x	x
18. Hillsdale	L. W. Day	x	x	x	x
19. Houghton-Baraga-Kewenaw	A. LaBine	–	x	x	x
20. Huron	C. W. Oakes	x	x	x	x
21. Ingham	R. S. Breakey	x	x	x	x
	L. G. Christian	x	x	x	x
	Milton Shaw	x	x	x	x
	John Wellman	x	x	x	x
22. Ionia-Montcalm	W. L. Bird	x	x	x	x
23. Jackson	J. J. O'Meara	x	x	x	x
	C. S. Clarke	x	x	x	x
24. Kalamazoo	R. J. Armstrong	x	x	x	x
	L. W. Gerstner	x	x	x	x
25. Kent	R. H. Denham	x	x	x	x
	Harry Lieffers	x	x	x	x
	W. B. Mitchell	x	x	x	x
	L. E. Sevey	x	x	x	x
	A. Van Solkema	x	x	x	x
	A. V. Wenger	x	x	x	x
26. Lapeer	D. J. O'Brien	x	x	x	x
27. Lenewee	H. H. Hammel	x	x	x	x
28. Livingston	H. L. Sigler	x	x	x	x
29. Luce	H. E. Perry	Not Repres'd.			
30. Macomb	D. B. Wiley	x	x	x	x
31. Manistee	E. A. Oakes	x	x	x	x
32. Marquette-Alger	R. A. Burke	x	x	x	–
33. Mason	C. A. Paukstis	x	x	x	x
34. Mecosta-Osceola-Lake	Paul Ivkovitch	x	x	x	x
35. Menominee	K. C. Kerwell	x	x	x	x
36. Midland	H. H. Gay	Not Repres'd.			
37. Monroe	T. A. McDonald	x	x	x	x
38. Muskegon	L. E. Holly	x	x	x	x
	R. H. Holmes	x	x	x	x
39. Newaygo	J. W. O'Neill	x	x	x	x
40. North Central Counties	R. C. Peckham	x	x	x	x
41. Oakland	R. H. Baker	x	x	x	x
	C. T. Ekelund	x	x	x	x
	P. E. Sutton	x	x	x	x
42. Oceana	C. H. Flint	x	x	x	x
43. Ontonagon	W. F. Strong	x	–	x	–
44. Ottawa	D. C. Bloemendaal	x	x	x	x
45. Northern Michigan	W. H. Mast	x	x	x	x
46. Saginaw	L. C. Harvie	x	x	x	x
	C. E. Toshach	–	x	x	x
47. St. Clair	George Waters	x	x	x	x
48. St. Joseph	R. A. Springer	x	x	x	x
49. Sanilac	R. K. Hart	x	x	–	–
50. Shiawassee	C. L. Weston	x	x	x	x
51. Tuscola	Harry Berman	Not Repres'd.			
52. Van Buren	W. R. Young	x	x	x	x
53. Washtenaw	H. H. Riecker	x	x	x	x
	C. Howard Ross	x	x	x	x
	R. Wallace Teed	x	x	x	x
54. Wayne	S. W. Insley	x	x	x	x
	J. J. Lighthody	x	x	x	x
	E. D. Spalding	x	x	x	x
	T. K. Gruher	x	x	x	x
	W. B. Harm	x	x	x	x
	W. S. Gonne	x	x	x	x
	H. B. Fenech	x	x	x	x
	C. K. Hasley	x	x	x	x
	J. A. Kasper	x	x	x	x
	W. L. Brosius	x	x	x	x
	H. F. Dibble	x	x	x	x
	A. E. Catherwood	x	x	x	x
	Richard Connelly	x	x	–	–
	C. F. Brunk	x	x	x	–
	R. L. Novy	x	x	x	x
	H. L. Clarke	x	x	x	x
	W. D. Barrett	x	x	x	x
	R. H. Pino	x	x	x	x
	L. J. Morand	x	x	x	–
	J. H. Law	x	x	x	x
	B. H. Douglas	x	–	–	x
	C. E. Lemmon	x	x	x	x
	J. H. Andries	x	–	–	–
	E. Osius	x	x	x	x
	William Bromme	x	x	x	x
	F. G. Buesser	x	x	x	x
	R. V. Walker	x	x	x	x
	M. A. Darling	x	x	x	x
	C. I. Owen	x	x	x	x
	W. J. Stapleton	x	x	x	x
	W. P. Chester	x	x	x	–
	Arch Walls	x	x	x	x
	E. G. Krieg	x	x	x	x
	D. C. Somers	x	x	x	x
	H. J. Kullman	x	x	x	–
	Douglas Donald	x	x	x	x
	L. W. Hull	x	x	x	x
	L. J. Bailey	x	–	x	x
	F. A. Weiser	x	x	x	x
	C. L. Candler	x	x	x	x
	W. W. Babcock	x	x	x	x
	W. B. Cooksey	x	x	–	x
55. Wexford	L. E. Showalter	x	x	x	x
Speaker	P. L. Ledwidge	x	x	x	x
Vice-Speaker	J. S. DeTar	x	x	x	x
Secretary	L. Fernald Foster	x	x	x	x
Immediate Past President	A. S. Brunk	x	x	–	–

J. J. O'MEARA, M.D.: Mr. Speaker, I have credentials of delegates, which is sufficient to form a quorum, 50 per cent of which is not from any one county.

THE SPEAKER: Thank you, Dr. O'Meara. If there is no objection, this report will be accepted as the roll call of this meeting.

The first order of business is the report on the appointing of the Reference Committees.

Our first committee to be appointed will be our Press Committee: Dr. Harry Dibble, Chairman; Dr. J. S. DeTar; and Dr. L. Fernald Foster.

I would like at this time also to welcome the members of the press and to ask them to show us this year the same courtesy that they have in the past, which courtesy means simply this: that nothing is to he reported without being passed through our Reference Committee.

The other Reference Committee will stand as they appear on page 5 of the Handhook, with these exceptions:

On the Credentials Committee, Dr. G. C. Stucky will replace Dr. B. P. Brown, and Dr. Harold Fenech has heen added to this Committee.

On the Committee on Officers' Reports, Dr. W. B. Harm will replace Dr. Henry Carstens, who is now in Philadelphia.

The Reference Committees will please meet immediately after this meeting is over, in the rooms assigned to them. For their convenience, the stenographers will he continuously in Parlor J. It is requested that the stenographers do not he asked to leave the room, that you bring all your reports there for typing.

The next order of business is the Speaker's Address. We will ask the Vice Speaker, Dr. DeTar, to take the chair.

[The Vice Speaker, J. S. DeTar, M.D., took the chair.]

THE VICE SPEAKER: It is a very distinct pleasure to be able to take the chair and present the Speaker of the House to you for his address. Dr. Ledwidge has been Speaker of the House for four past sessions, and we are on the fifth session. In fact, it would be difficult to imagine the House running without Dr. Ledwidge at its helm. It is a great pleasure to present Dr. P. L. Ledwidge as Speaker of the House.

II. Speaker's Address

In these days of collective bargaining, individual irresponsibility, and worldwide unrest, one hears much of "Public Relations"; a term hard to define, an activity difficult to carry out, a project the validity of which is sometimes questioned. As it applies to the Michigan State Medical Society, Public Relations may be defined as an activity of the Society designed to create a better understanding of the mutual problems of our profession and public it serves. This better understanding should be for the edification and benefit of both groups. These questions naturally arise: Is there need for such a program at this time? If so, how should it be set up and how should it be financed?

The answer to the first question seems obvious. The need for a public relations program at this time is urgent. There is grave danger that the practice of medicine as we have known it shall cease to exist, and that some form of governmental medicine will take its place. To prove this statement one needs but to review recent legislative trends.

In the years 1935 to 1944 inclusive, one hundred proposals for some form of compulsory health insurance were introduced into various state legislatures. Over one-third of these were introduced in 1944. In the last session of the California State Legislature, a bill for compulsory health insurance failed to pass by only one vote. President Truman has given his blessing to this type of legislation by including a request for a compulsory health measure in his recommendations to Congress. Our old friend the Wagner-Murray-Dingell Bill, rejected by Congress in 1943, was rewritten and again introduced into Congress last November. Hearings on this bill were held before a sub-committee of the United States Senate with Senator Murray as Chairman in the spring and summer of this year. During these hearings which lasted many weeks, these interesting facts were brought out:

1. The bill was written almost in its entirety by Isadore Falk of the Social Security Board.
2. It has the active support of several large groups of influential people including some inspired members of the medical profession.
3. The bill is misleading in many respects, for example: it purports to give complete medical care to all our people, but reserves to the Surgeon General the right to limit these services. It promises free choice of physician, but in the last analysis the patient may have this privilege only by paying his physician on a private fee basis over and above what he has already paid for health insurance. Literally it calls for no coercion of doctors of medicine; but from a practical economic standpoint, the average physician will be forced to participate or quit the practice of medicine.

When it became evident that the Wagner-Murray-Dingell Bill probably would not pass during the then current session of Congress, a strenuous effort to get the Pepper Bill out of Committee and before the Senate for vote was made. You will recall that this bill provides for care at government expense of all maternity cases and all children up to eighteen years of age regardless of their financial status. It has been estimated that this group comprises about 40 per cent of our total population.

This attempt to get the Pepper Bill out of Committee failed but there is no certainty that the present status will be maintained. It is possible that the President will call a special session of Congress after the November election in an effort to push through these two bills and other similar legislation before January 1.

Thus the seriousness of the situation is easily seen. Some of our members believe that Socialized Medicine is coming in spite of anything we can do to prevent it, and that we are wasting our time and money in offering further resistance. Perhaps they're right. We may lose this fight, but so far these vicious bills have not been passed. So let's keep punching.

The folly of changing from medicine by private practice to governmental, and therefore political medicine, was clearly pointed out in an editorial in the August 9, 1946, issue of *The Detroit News* as follows:

"Since state medicine was originated in Germany sixty years ago, the cost of the program in that country multiplied 100 times, and 50 per cent of the money taxed out of the people to support it was used for overhead administration of the scheme.

England followed with state medicine forty years ago, and the cost of the program has multiplied seventy times.

The secretary of the British Medical Association recently declared that no system of medical care can succeed if it is controlled by the government.

The Minister of Health of New Zealand has said that in the six years of government medicine in that country the system has degenerated into a racket, filling the hospitals with patients with minor ailments, while doctors are losing interest in advanced study and in medical and surgical specialties.

Austria, Italy and France, under state medicine, have given the people inferior medical service, according to Dr. Dublin, of the Metropolitan Life Insurance Co., who recently toured Europe on an inspection of medical needs.

Dr. Dublin adds that "medical care of the people of the United States is the best of any in the world."

Conclusion:—Kill the Wagner-Murray-Dingell Bill, which would create Government-controlled medicine for the people of this country."

It is up to us to see to it that this change to political medicine is not made. The public must be shown that the practice of medicine as a private enterprise is better and cheaper than any form of governmental medicine so far either tried or proposed. The members of our profession must realize that there are some definite weaknesses and defects in our present methods of distribution of medical care. These weaknesses must be corrected to the end that every individual in this country may have necessary medical care at a price he can reasonably afford to pay.

The question of how best to organize and carry on our public relations program is more difficult of decision. In the past two years and especially this year an active program has been in progress. Each one of you has received a pamphlet outlining the work being done in 1946 and submitting a tentative program and budget for 1947. Please study it carefully so that when it comes up for discussion tomorrow night you may be prepared intelligently to approve or disapprove it; and to offer suggestions for better methods of approach.

Some weeks ago each member of The Council was requested to submit to the Finance Committee his ideas as to the best way of financing the public relations program. Your Speaker would like to repeat here the suggestions he made in writing to Dr. E. R. Witwer, Chairman of the Finance Committee, at that time:

1. In order that the common interest of the public and our profession be best served, it seems necessary that we carry on an active public relations program at this time.

2. This program should be financed by a special assessment on the individual members of the Michigan State Medical Society rather than by raising the annual State Society dues.

3. Such assessment should be for the lowest possible amount compatible with the essential needs for the 1947 program.

4. Funds thus raised should be earmarked for Public Relations, subject to special accounting, and should not be considered a part of the general fund.

VICE SPEAKER: The Speaker's Address will be referred to the Committee on Officers' Reports.

(The Speaker resumed the chair.)

THE SPEAKER: It is now my pleasure to call on our President, R. S. Morrish, M.D., for his Annual Address. Dr. Morrish.

III. President's Address

Everyone here this evening will appreciate the changed conditions which again permit us to hold a regular convention of our State Medical Society, and to know that a large part of our membership is home again after an absence of several years in world-wide conflict. Those of us who were left behind to care for civilian needs, have carried on to the best of our ability, though in doing so there has been a startling number of casualties. Likewise those who entered the service of our country have made many sacrifices, and some unfortunately have made the extreme one—Better for all of us that we can be reunited once again, and together carry the torch of organized medicine to new heights of perfection. During the past year it has been my lot to serve as your president, and to assume the duties of that honored position the incumbent can but humbly appreciate the trust you have placed in him and to hope that in some small manner he can justify your decision.

I shall release this office in a few days, and will be succeeded by Dr. William A. Hyland, and let me congratulate you on your good judgment in choosing him for your president in 1946-47. His service to you in past years speaks for itself, and I am convinced he will render good leadership in the coming year which will be an important one from a legislative standpoint. I wish to take this opportunity to compliment your Speaker, Dr. Ledwidge. He has proved himself a capable speaker, and has been very helpful to me during my term of office, and I can truthfully say as much for all of the other officers of our Society.

The past year has been marked with considerable activity by your Society, and our Committees on the whole have done excellent work. I cannot name them all here, nor enumerate all they did. You can get a good idea of their accomplishments by reading their written reports, but I do want to call your attention to two or three of these reports. First, the Ethics Committee: It reports that no meetings were held within the year. At first thought we might wonder why. But the reason for this inactivity is the fact that there were no serious controversies in any of our counties which required attention on a state level. I consider this a healthy state of affairs.

Legislative Committee: Inasmuch as the state legislature was not in session during the year, this Committee was not very active, but in the coming year there will be much for it to do and you may be sure from past performance, this Committee will give good account of itself. I want to point out the importance of this Committee, for The Council has placed the responsibility of leadership in public relations to this Committee, and to the Public Relations Committee. It is charged with the responsibility of investigating any proposed state or federal legislation which might affect the health of the public.

I think the most outstanding progress this Society has made is in the field of public relations. We have secured the services of a Public Relations Counsel whose duties are to consult with officers, and committees, and to carry out their instructions in order that the Public Relations Plan can be actively and effectively implemented. There has recently been mailed to you a booklet setting forth the future plans of the Michigan State Medical Society, and I commend its contents for your careful consideration in order for you to formulate your own opinion on the projects tentatively planned for 1947. Michigan has been outstanding in acquainting the public with its activities in promoting good health, and to offer service protection against the sting of catastrophic illness, and it is most heartening to see similar activities now shaping up on a national scale. The people of this country will be made to see that the medical profession has the public welfare at heart. That it is united in its opposition to philosophies and plans which threaten to lower the high standards of practice which it has voluntarily established for itself and that the control of the medical profession should be limited to the statutes which affect the qualifications of Doctors of Medicine, and to those which provide for ethical conduct.

To demonstrate that our Society has the ability and the will to make whatever study of public need that may arise, is well demonstrated by the activities of our Child Welfare Committee. It co-operated with the American Academy of Pediatrics in its nation-wide study of child health care and services, and did this work on a voluntary basis without aid of government funds.

When governmental agencies come forth with worthwhile and workable plans for the public good, the medical profession is willing, and has the means and proper organization to render a service to government wards, provided the private physician-patient relationship is preserved. Our contract with the Veterans Administration is an excellent example of decentralized government medicine, providing home town medical care to veterans, in which the agency recognizes the problems and rights of the medical profession. It pays according to a fee schedule adopted by ourselves, and has accepted our classification of practitioners which seems to be the fairest and most equitable seen anywhere. This should dispel the accusation that the medical profession is against everything the government proposes. All we ask is a bargaining right and a willingness of the other party to appreciate our ideals and needs, and first of all to determine what the needs of the beneficiary are.

Michigan is a proved leader in the field of socio-economics. Our various surveys have shown what the public needs are in medical care and have solved to a large extent the answer to that need. We have the answer when ill-advised plans are brought forth which would wipe out with the stroke of a pen all that experience we have acquired painfully and at high cost. Excellent care is offered the public at a minimum of operational cost. We must really have something if outside interests want to get in on our health activities. No doubt they see a chance to set up a large controlling machine, a taxing machine if you please, and away goes all that fine spirit of confidence that has existed between doctor and patient through the centuries. Does any one think this taxing group will be an economical body? We'll have none of their planned economy. The public will have none of it either when they get to know all of its implications, and that is the job for our public relations department. To spread the truth! To tell them what our service plans have to offer. And here is where unity of purpose comes in. We have two agencies giving health service. One giving health service proper, and the other hospital service only. One cannot well live without the other. True at times one may be up and the other down and vice versa according to conditions and circumstances. They can and will survive all storms if they stick together. They must be democratic in operation, truly representative of their component parts, and personalities must give way to public need. None of those things is impossible if level heads get together and reason out a cure. And when they come out with a united purpose there will be no pointing of a scornful finger by our legislative minded, and tax minded adversaries who would want to say, "I told you it wouldn't work, we need government medicine." Give them a united front! They won't like it. We have nothing to fear if we keep ourselves right. We have a God-given mission in this world. To heal the sick and its a part of our duty to protect these people. We must make known our purpose and these same people will grapevine the word along to our legislators something like this: "We want good medicine, honest medicine. We want our doctor of choice, just leave him alone."

Now gentlemen you are here to deliberate on quite a number of issues, and resolutions. My term of office will be over in another two days, and it seems presumptious for me to stand here, and tell you what we have done, or what we hope you will do during this session.

In San Francisco, Mr. Upton Close told a meeting of State Officers that we are in big business, 6 billion dollars worth, and, apparently, don't know it. He advised that we play the part—let the people know we are Big Business—let Congress know we are Big Business, and then, and then only would we command the respect that is our due, and likewise would be looked upon as the authoritative body in matters medical.

In electing you as our delegates, we, the doctors of Michigan, feel that the affairs of our Society are in good hands. Certainly the events of the past year have alerted us to our responsibilities as protectors of the public's health and to our need for good citizenship. And in leaving you I wish to express the great pleasure it has given me to be associated with you for six years as Councilor, and the past year as your President, I wish you all God speed in your endeavors.

THE SPEAKER: This report will be referred to the Reference Committee on Officers' Reports.

The next order of business is the Report of The Council, the Annual Report to be given by E. F. Sladek, M.D., Chairman of The Council. Dr. Sladek.

IV. Annual Report of The Council

The Annual Report of The Council for the year 1945-46 appears in the Handbook for Delegates beginning at Page 33. As this report was written July 19 in order that it might appear in print, The Council wishes to submit additional information on matters which it has considered during the past two months.

1. *Uniform Fee Schedule for Governmental Agencies.*—This subject is covered in the original report of The Council (Item 2 on Page 40 of the Handbook).

Secretary Foster addressed the Michigan Association of Boards of Supervisors at its Sault Ste. Marie meeting last Tuesday, giving his audience the background and philosophy of the Michigan State Medical Society regarding its necessary adoption of the Uniform Fee Schedule for Governmental Agencies. Gentlemen, your supervisors now know the story and we believe will be in a more receptive mood to accept this Schedule.

Individual members of a county medical society should not be penalized by being forced to perform services at a financial loss and below the fees either charged for private patients in the areas or those indicated in the Uniform Fee Schedule for Governmental Agencies. Therefore, if your local governmental fee schedules are not comparable to the Uniform Fee Schedule for Governmental Agencies, we urge that you bring to your County Medical Society—for immediate action—the matter of negotiating necessary revisions in schedules of benefits covering governmental wards, as indicated in The Council's recommendation No. 2 (on Page 46 of the Handbook).

Please note that this Fee Schedule now has the approval of the U. S. Veterans Administration, the Michigan State Office of Veterans Affairs, the Michigan Crippled Children Commission, the State Welfare Commission so far as its federal categories are concerned, and that it has been approved in principle by the State Rehabilitation Office. All this has been accomplished in one year's time by the medical profession's presentation of a united front for a just cause.

2. *Michigan Medical Service.*—An up-to-date report on this corporation will be presented to you at the meeting of Michigan Medical Service membership tomorrow (Monday, September 23, 2:00 p.m. in this room). You will also be informed on the present relationships between Michigan Medical Service and Michigan Hospital Service.

3. *Michigan Foundation for Medical and Health Education.*—Since the printed report of The Council (Page 42 of the Handbook), a total of $2,375 additional has been contributed to the fund. Just about 60 per cent of the goal has been reached. The need to build up the Foundation by contributions from doctors of medicine—to prove that medical men favor their own medical and health education fund—is obvious. The Foundation's Board of Trustees is developing a brochure to aid in this work. We invite your attention again to our Recommendation No. 1, on Page 46 of the Handbook.

4. *New Taft Bill.*—An improved Taft Bill will be introduced into the Federal Congress at the next session.

5. *Membership.*—The membership of the Michigan State Medical Socety as of September 15, 1946, totals 4,670, including 1,373 Military Members who are granted remission of dues and assessments for the year 1946. Many of these veterans—those separated from military service during the last half of 1946, or during 1947—will also have their Michigan State Medical Society dues and assessments remitted for the year 1947.

6. *Finances.*—According to Article IX, Section 2 of the Michigan State Medical Society Constitution, The Council is charged with administration of the funds of the Society. Section 3 of the same article reads: "The invested funds of the Society shall be delivered to the Treasurer."

Section 4 of the same article orders The Council to "cause an annual audit to be made of the funds of the Society by certified public accountants." This has been done annually, and routinely published in the JMSMS. The latest report of Ernst & Ernst was published in the March, 1946, issue of THE JOURNAL, MSMS, beginning on Page 382. On this same page is a copy of the budgets of the Society for the year 1946. The audit of Ernst & Ernst is and always has been open for inspection by any member of the MSMS who may call at the Executive Office, 2020 Olds Tower, Lansing.

The report of our auditor for the first eight months of 1946—to September 1, 1946, is as follows:

INCOME AND ACCOUNTS RECEIVABLE: Jan. 1 to Sept. 1, 1946		
Society dues	$34,041.12	
Journal subscriptions (allocation from dues)	5,041.41	
Public Education ($25 assessment)	80,917.28	
Interest received	228.40	
Advertising, reprints & cuts	33,167.91	
Annual Meeting Income	11,040.00	
Total income and accounts receivable		$164,436.12
EXPENSES, Jan. 1 to Sept. 1, 1946		
Administrative and general	$16,816.49	
Society expense	9,490.25	
Committee expense	4,281.63	
Public education expense	38,712.27	
Journal expense	29,486.54	
Annual meeting expense	2,920.72	
Total expenses paid Jan. 1 to Sept. 1		$101.707.90
Balance (cash and accounts receivable)		$ 62,728.22
Cash on hand ($56,065.31) and accounts receivable	$62,728.22	
Estimated expenses of MSMS (including Public Education account) for last 4 months of 1946	46,000.00	$ 16,728.22
Savings Account		$ 13,410.36

Bond account	Cost
(a) General Bond Account:	
American Tel. and Tel.	$ 2,060.00
Dominion of Canada	947.50
Canadian Pacific Railway	1,855.00
Consumers Power Company	1.020.00
Detroit Edison Company	2,187.50
Grand Rapids Affiliated Corp.	920.00
N. Y. Central Railway	1,173.75
Union Pacific Railway	991.25
United Light & Power	925.00
Southern Pacific Co.	850.00
U. S. Savings Bonds Series G	28,600.00
U. S. Savings Bonds Series C	6,900.00

U. S. Savings Bonds Series D	1,131.00	
U. S. Savings Bonds Series F	2,896.20	$52,457.20
(b) Bonds earmarked for Public Education: U. S. Savings Bonds Series G	$30,000.00	$30,000.00
		$ 82,457.20

7. *Public Education Account of 1945-46.*—This account, accumulated from the special $25 assessment levied by the 1945 House of Delegates, has been kept separate from the other accounts of the Michigan State Medical Society and has been used exclusively for public relations and for educational purposes, as indicated by the following accounting:

PUBLIC EDUCATION ACCOUNT

Financial Report—January 1 to September 1, 1946

INCOME		
Balance carried over from previous year	$12,150.00	
Income 1/1 to 9/1, 1946	80,917.28	
Total		$ 93,067.28
DISBURSEMENTS		
Salaries	$ 3,979.70	
Rent & Light	70.00	
Tel. & Tel.	369.78	
Printing, Stationery & Supplies	898.90	
Postage	590.58	
Office Equipment	770.42	
Travel Expense	918.71	
Public Relations & Secretaries' Conference	1,586.77	
Purchase of Pamphlets	1,568.26	
Michigan Health Council	5,000.00	
Public Relations Program—Radio	15,375.80	
Newspaper Advertising	6,322.15	
Conference of Presidents	172.17	
National Conference on Medical Service	329.78	
Committee meetings	553.41	
Miscellaneous Expenses	205.84	
Total Disbursements 1/1 to 9/1, 1946	$38,712.27	
Reserve (earmarked bonds)	30,000.00	
		$ 68,712.27
Balance September 1, 1946		$ 24,355.01

In the Public Relations Plan of the Michigan State Medical Society (copy of which was mailed to you on September 14) a financial report for the first six months of 1946 is presented on Page 39. (Note that the financial statement in this Supplemental Report of The Council covers eight months, not six months).

Estimates of the probable cost of the 1947 public relations program of the Michigan State Medical Society, as projected by the Public Relations Committee, are presented in the Plan on Page 51.

8. *Information to the Public.*—Today organized medicine is being forced to carry a greater load in public relations and information to the public than was ever anticipated—even as late as five years ago—by forward-looking medical leaders. During 1947 critical problems will face medicine; we must anticipate a new Wagner-Murray-Dingell bill and requests for broader social security benefits in the Federal Congress; our State Capitol will see many legislative proposals inimical to the people's welfare and to scientific medicine.

The Michigan State Medical Society must realize the threat now and make ready to use all counter offensives that have been developed.

Our progressive public relations program is our best weapon; it must be sustained and made stronger. We have a mammoth job of public relations to do; it must be financed. Our two-fold job of information—first to the profession and secondly to the people—is absolutely necessary. We must continue telling the doctors and every person in the State of Michigan the facts about quality medical service, its wider distribution, and its costs. The medical profession must continue its fight to preserve the private practice of medicine as we know it, in the interests of the people we serve. *A recommendation on this subject follows.*

RECOMMENDATION

1. The Council recommends that the House of Delegates authorize the continuation of the progressive public relations program of the Michigan State Medical Society as outlined in the brochure entitled "Public Relations Plan" approved by the Executive Committee on August 21, 1946, and approved by The Council on September 22, 1946, and that it finance this important and necessary project by a per capita membership assessment of $25 for the year 1947.

E. F. Sladek, M.D.: Mr. Speaker, may I add a few words?

It has come to our attention that during the past year some criticism has been directed toward the policies of the Officers and The Council of the MSMS. Criticism, principally based upon a lack of knowledge of the activities and the function of the Society. Opinions and criticisms should be based upon facts and not upon ethereal suppositions.

Every effort known to us has been expended in attempts to bring full knowledge of our activities to our membership. Failure to understand just what is going on in medical politico-social activities must be assumed by each individual physician. We, your officers, plead with you, our membership, to read The Journal of the Michigan State Medical Society; particularly the columns "Editorial Comment" and "You and Your Business." Read the numerous Secretaries' Letters, which are sent to all the membership at intervals throughout the year. Attend your county society meetings and participate in the discussion of the Secretary's Letters which your county officers receive. First obtain the facts: then formulate your opinion.

Medical leadership by the officers of the MSMS is an established fact throughout the whole of the United States. Were it not for the foresight and a tremendous amount of hard work and unnumbered hours of time devoted to consideration of medical socio-economic problems by your officers and the various council committees assigned to the job, you doctors would now be working under the handicap, the directives, and the vicissitudes of the W-M-D Bill. Of this, we are firmly convinced.

Let me interpose my official thanks to all the members of the various standing and special committees of the Council appointed by me for their unselfish devotion of time and thought given to the problems confronting the MSMS.

Two years ago, your newly inducted president, Dr. A. S. Brunk, fully conscious of the lack of interest in efforts to combat national legislation affecting the future of medical practice, conceived the idea of the formation of an organization of presidents and other officers of state medical societies, through which he hoped to stimulate our parent organization into an active legislative program beneficial to medicine.

The eminent success of this new body is proven by its influence upon the Council of Medical Service and Public Relations, which has become the most active department of the AMA. Following the baton of Dr. Brunk's organization, this Council, and its activities, have dominated the discussions and deliberations of the last two meetings of the House of Delegates of the A.M.A.

The results: (1) Propaganda and assistance toward the formation of new prepayment medical service plans and a definite increase in subscribers on a national distribution; (2) development in the lay mind of interest in some form of voluntary health insurance system, as opposed to governmental compulsory plans, (3) interest in positive legislative programs on a national basis, (4) more efficient activities in direct opposition to compulsory health legislation, (5) the reorganization of the mechanical setup of the AMA headquarters, with the formation of a new public relations department.

This, ladies and gentlemen, is medical leadership, and a distinct tribute to Michigan Medicine.

I want to read again the recommendation of The Council in the supplemental report.

"The Council recommends that the House of Delegates authorize the continuation of the progressive public relations program of the Michigan State Society as outlined in the brochure entitled "Public Relations Plan" approved by the Executive Committee on August 21, 1946, and approved by The Council on September 22, 1946."

This is the plan that we have approved [holding up book]. It has been approved by the Executive Committee and The Council as a whole.

". . . and that it finance this important and necessary project by a per capita membership assessment of $25 for the year 1947."

THE SPEAKER: This report will be referred to the Reference Committee on Report of The Council.

We will now hear the report of the Delegates to the American Medical Association, by Dr. L. G. Christian, Chairman of the Michigan Delegates. Dr. Christian.

V. Report of Delegates to AMA

L. G. CHRISTIAN, M.D.: The report will be made in three sections. I will read the written report, and we will ask Dr. Gruber to talk on his resolution, and then we will ask Dr. Henry Luce to give us some of his ideas.

The 95th annual session of the American Medical Association met in San Francisco, July 1-5, 1946.

The House of Delegates was called to order by the Speaker, Dr. R. W. Fouts. The Distinguished Award was given to Dr. A. J. Carlson, of the University of Chicago, who was elected over Dr. Torall Sallman and Dr. Frances Carter Wood of New York. The speaker's address pertained mainly to a plea for unity. This was followed by an address by President Roger I. Lee of Boston and President-elect H. H. Shoulders of Tennessee. Both men reviewed the current problems of the medical profession and urged extension of voluntary pre-payment medical plans to all the states.

The Board of Trustees reviewed its actions for the past year, paying particular attention to the Murray-Wagner-Dingell Bill. Dr. Lee recommended two meetings of the House of Delegates each year to be held in June and December.

As usual, there were numerous resolutions on practically every question that confronts organized medicine. Some did not appear to be germane to the business of the House.

Dr. T. K. Gruber presented probably the most important resolution, urging the American Medical Association through the Council on Medical Service and on Public Relations to interest itself and offer its services to the United Mine Workers and to similar organized regular groups in regard to the newly created fund, created by the Bituminus Wage Agreement. A similar resolution was presented by a delegate from Kentucky, these were adopted and The Council is now attempting to reach some agreement, whereby the profession may lead in health matters among the miners.

A resolution by Dr. L. G. Christian was introduced relative to Medical Care of Veterans. The reference committee deleted all reference to the Michigan State Medical Society and the Michigan Medical question and brought in a modified resolution. A resolution was introduced by Dr. Sargeant from Wisconsin, asking that the By-Laws be amended so that resolutions would be presented to the Secretary of the Association thirty days prior to the meeting of the House of Delegates. The Committee on the Constitution and By-Laws felt that the plan had some merit, thought it did not feel it was wise to write into the By-Laws, but suggested that the resolution be presented to the House and allow the membership to vote on it. This did not carry.

The Board of Trustees reported on a survey on Public Relations and the revamping of the Association as a whole. It was suggested that a Department of Public Relations headed by an expert in this field be established, and that the Editor of the JOURNAL activities should be limited to the editing and supervision of the *Journal of the American Medical Association, Hygeia,* and some of the special journals. It was intimated that he was not to be a spokesman of the AMA. This survey which was given and known as the "Rich Report" was not in full to the House of Delegates, as the Board of Trustees evidently felt that the mental equipment of the Delegates was not sufficient to pass on such a far-reaching document. Instead they asked for the appointment of an Iterim Committee to study the report and report their findings to the House of Delegates in December.

Another resolution introduced by Michigan, commending Senator Taft and his colleagues for the introduction of the so-called Taft Bill, was passed with certain modifications.

Dr. Olin West, who had been Secretary and General Manager of the Association since 1922, and who resigned in April, 1946, was elected President-elect without opposition. Dr. George Lull was elected Secretary, Speaker of the House, Dr. R. W. Fouts of Omaha, was elected over Dr. Lowell S. Goin of Los Angeles by thirteen votes, the closest election for a number of years. Somebody must have put some sand in the well oiled machine, even though not enough. Dr. F. F. Borzell of Philadelphia was elected Vice Speaker, and Dr. Charles Roberts of Atlanta was elected to the Board of Trustees to succeed himself. Dr. Edward McCormick of Toledo was re-elected to the Council and Medical Service and Public Relations.

Dr. Olin West addressed the House following his election and praised the work of the Association, its officers, and employes for the great strides accomplished by the Association in protecting the rights and privileges of the practitioners of medicine in these United States. He also spent some time discussing the hierarchy of the American Medical Association, saying that he had heard of it a great many years and while he had searched diligently and had looked in all the corners and crevices of the AMA he had failed to find any evidence of such a thing existing.

The registration at San Francisco was the largest ever recorded at an annual meeting. There were 7,746 physicians registered.

The Michigan delegation, including Dr. H. A. Luce, Dr. T. K. Gruber, Dr. F. R. Reeder, and Dr. R. H. Denham, who served as an alternate for Dr. Keyport, who was unable to attend, and Dr. L. G. Christian, were present at every session of the House and took active part in the deliberations. The Michigan delegation is pleased to note that other members of the State Society who are delegates from other sections, namely: Dr. Grover C. Penberthy, Dr. Burt R. Shurley and Dr. Jean Pratt, worked harmoniously with the state delegation. They are all keen, able delegates, who are extremely interested in the progress of organized medicine.

Respectively submitted,
HENRY A. LUCE, M.D.
THOMAS K. GRUBER, M.D
R. H. DENHAM, M.D.
FRANK E. REEDER, M.D.
L. G. CHRISTIAN, M.D.

RESOLUTIONS ON MEDICAL CARE OF VETERANS

WHEREAS, The Veterans Administration of the United States, through its medical director, Gen. Paul R. Hawley, has expressed need for assistance and has repeatedly requested aid of organized medicine in providing medical care for veterans; and

WHEREAS, The Michigan Medical Service, an organization founded and sponsored by the Michigan Medical Society as a medium of affording the people of Michigan voluntary low cost medical care of good quality; and

WHEREAS, The medical care to be furnished through Michigan Medical Service is to be rendered by physicians freely chosen by the individual patient; and

WHEREAS, The physicians so rendering medical care are to be compensated on a fee for service basis and to be paid directly by Michigan Medical Service; and

WHEREAS, Michigan Medical Service has entered into a contract with the Veterans Administration for the care of veterans in the state of Michigan suffering from service connected disability; and

WHEREAS, The arrangement not only provides the Michigan veterans with good quality medical service for service connected disability with choice of home town doctor of medicine but as well provides the American public generally with a demonstration of the willingness and ability to provide a practical workable answer to this and similar problems of provisions of medical care without compulsory means or political controls and is productive of good

public relations for the medical profession as evidenced in *Colliers* May 11, 1946, and condensed in the *Reader's Digest* July, 1946, therefore be it,

RESOLVED, That the House of Delegates recommend the Michigan or similar plans for the medical care of veterans to the various state associations and urge them to adopt plans so that good medical care be furnished to the veteran in his house community by the physician of his choice; and be it further

RESOLVED, That the House of Delegates instruct the Council on Medical Service and Public Relations to use its influence and facilities to the states and Veterans Administration in the formulation and activation of these plans.

REPORT OF REFERENCE COMMITTEE ON MEDICAL CARE OF VETERANS

Dr. Stephen E. Gavin, Chairman, presented the following report, which on motion of Dr. Gavin, seconded by Dr. W. R. Brooksher, Arkansas, and carried, was adopted:

Resolutions on Medical Care of Veterans: Your reference committee approves the resolutions introduced by Dr. L. G. Christian, Michigan, modified to read as follows:

WHEREAS, The Veterans Administration of the United States, througth its medical director, Gen. Paul R. Hawley, has expressed need for assistance and has repeatedly requested aid of organized medicine in providing medical care for veterans; and

WHEREAS, A number of states through the action of their medical societies have demonstrated the effectiveness of state medical society action in planning and providing for such assistance as requested by the Veterans Administration; therefore be it

RESOLVED, That the House of Delegates recommend that medical societies in each state where no plan is now in effect proceed at the earliest possible moment to adopt a program suited to their particular needs and requirements and designed to fulfill the medical responsibilities of the Veterans Administration to the veteran in the closest conformity to the principles of good medical practice.

Now we shall have Dr. Gruber talk and explain his resolution, as he presented it.

T. K. GRUBER, M.D. (Wayne): Last May, when I was going to Chicago, I noted in the paper that they had settled the coal strike. I don't believe that there are many people in this country who realize what the settlement of that coal strike hinged on. The settlement of the coal strike hinged on a deduction of five cents a ton to take care of the welfare activities of the coal miners. It also hinged on the permission of the Union to not only use the money but such other moneys as they may assess their membership to take care of the medical and hospital bills of these people.

It is my contention that so far as the Murray-Wagner-Dingell Bill is concerned, it is out the window. Mr. John Lewis is not going to pay taxes twice. It has come to my attention that certain of the labor organizations about the country, and particularly those that are active in Michigan, are interested in a ten-dollar car deduction for the same purpose in Michigan.

I hope you will give this careful consideration. I don't think it had dawned on very many doctors what this means. It seems to me that if the American Medical Association and the Michigan State Medical Society and other medical organizations get into this on the ground floor, they may be able to direct the handling of this money.

Again I say, I am convinced that organized labor is not going to be taxed twice.

It all depends on how well this thing is handled by organized medicine as to where we get. The following was introduced in the AMA House of Delegates last July by your Michigan delegate:

WHEREAS, The American Medical Association and this House of Delegates should not attempt to lead in the application of this arrangement now, rather than some years hence discover that organized medicine is at variance with whatever plan is evolved, organized medicine dictated to instead of assisting in the format, therefore, be it

RESOLVED, That the House of Delegates of the American Medical Association accepts as accomplished the National Bituminous Wage Agreement, as far as it involves health and medical service, and be it further

RESOLVED, That the Council of the American Medical Association be immediately authorized to work out the co-operative plan for arranging and putting into operation a plan, and be it further

RESOLVED, That the American Medical Association co-operate in every way in bringing this into fruition.

I hope that this sinks into everybody's mind, because here in Michigan we are going to have a problem.

A meeting has been held since by the Council on Medical Service with a group down in West Virginia. Dr. K. E. Markuson, Chairman, MSMS Industrial Health Commission, and Mr. Ketchum of MMS, were present. I think it might be well if they could bring to this House of Delegates some idea of what went on at that time.

I do feel that this is an important thing. If each one of you will get your *AMA Journal* of July 20, page 984, in each one of your Journals for the month of July or August, you will find the proceedings of the Delegates of the American Medical Association. It will be well worth while your reading it.

I just leave this thought with you, because you are going to have to consider it and maybe fight it as hard as you did the Murray-Wagner-Dingell Bill.

L. G. CHRISTIAN, M.D.: We shall now hear from Dr. Luce, who will make some comments.

THE SPEAKER: Dr. Henry Luce.

H. A. LUCE, M.D.: I am dreadfully embarrassed because this is the first time in twenty-five years that I have appeared before this House without a badge.

Just briefly, to lead up to what happened in San Francisco, in 1933 The Council of the Michigan State Medical Society, or rather its Executive Committee, went over to Chicago to find out what sort of leadership Dearborn Street was attempting toward the medical problems which were facing us. We received no help. We received the usual amount of verbosity that characterizes many of our communications or has in the past at least.

Michigan was not discouraged, and thanks to Dr. Phil Riley, I was one of the individuals selected to make a study in Europe. When we returned from Europe with the recommendation that some sort of medical service be tried out in spot areas, that was published in the Michigan State Medical Society Journal, and a copy of this Journal was sent to every state in the union.

The next AMA meeting was in Cleveland in 1934. I was just as poular down there with the powers that be, as the proverbial skunk at a lawn party. I was called before the Board of Trustees of the American Medical Association and given a grand jury investigation. I was kept standing on my feet for nearly two hours, taking their questions. Nothing was done about it at the Cleveland session.

Michigan kept working along this line that you have worked along, and during all this time I was only a representative or a spokesman for the Society.

Finally, this last year in San Francisco, it appears that the thoughts and ideas that were promulgated by Michigan have finally been accepted. Throughout all of this time there were spot areas in the House of Delegates that have favored it.

The progress in regard to medical service and medical plans in the Committee on Public Relations and Public Health is in good hands, and they are doing a good job.

At this time, Mr. Speaker, I would like to express to the House of Delegates from the Michigan State Medical Society my deep appreciation for all the kindnesses and tolerances with which you have dealt with me, and I can assure you that I shall always keep my interest in medical affairs in the state of Michigan and in the United States.

Thank you, Mr. Speaker.

THE SPEAKER: These reports will be referred to the Reference Committee on Officers' Reports.

We shall now hear from Edward F. Stegen, Associate Administrator of the National Physicians' Committee.

VI. Address of Mr. E. F. Stegen, Chicago

I was very pleased when your Speaker told me that I was to appear on your program at this particular time, because I feel that what I have to say to you certainly comes specifically under the title of Reports, and you have heard reports of your officers, of your AMA delegates, and in the fullest sense of the word I feel that I come before you gratefully to give you a report on the activities of the National Physicians' Committee, in behalf of preserving, for the people of this country the great achievements, the great prospects, the aims and the goals of the independent practice system in medicine.

I would be remiss in my first duty if I did not say at the very outset that the National Physicians' Committee is continuously grateful to your great Society and to the committee which was created through the efforts of this House of Delegates a few years ago, known as the Michigan Physicians' Committee of the National Physicians' Committee for the Extension of Medical Service.

To those men, to the officers of the Michigan Physicians' Committee and the men who served on that body, certainly I convey my sincere personal gratitude and that of the Board of Trustees of the National Physiciancs' Committee.

I am sure that all of us realize that perhaps the greatest period of activity in NPC's program took place during the months of April, May, June and July, in the course of the hearings on the Wagner-Murray-Dingell Bill in Washington. It was our privilege to hold in January a National Professional Conference and Seminar in the city of St. Louis, where we undertook to inform outstanding representative physicians from each of the forty-eight states on the imminence of the hearings; and, secondly, upon a pattern of activity in connection with those hearings. The conference was well attended and I believe accomplished in full its purposes, because in the course of the hearings many of the men who came down to Washington to testify had

an opportunity at least to confer with our people and to be given advice and information on the most recent and daily activities of the Committee on Education and Labor.

In addition to those who came to testify, delegations from thirty-three states came to Washington for the purpose of contacting the Senators from their respective states and talking to their Congressional delegations.

I don't want to spend too much time on the W-M-D hearings because you are very familiar with the work that was done by all the forces of medicine. In conclusion on that point, I would like to say that there has appeared a certain variation of individual motivations. Some of you have had comments by bulletin from Dr. Marjorie Shearon, in which she is unkind in her opinion and expressions of the National Physicians' Committee. That is an unfortunate instance, because Dr. Shearon certainly gave yeoman service to the Committee of the Minority and was an important factor in dealing with the threat of compulsory practices in this conference. However, I have personally felt there was work enough for us all, certainly more work than we could do properly, and there is glory enough for us all, because the bill was soundly and thoroughly defeated, and in that there is glory enough for all.

The educational program of the National Physicians' Committee has been a very greatly expanded program since I had the privilege of reporting to you last. In almost every field, through almost every medium and the use of every technique in the field of public relations and selective group education and mass education, we have moved forward to a very high degree, I think, of effectiveness. I just mention a few of the items so that you will have illustrations of how our work has developed.

As you all know, in the high schools and junior colleges of the country, during this school year, the national debate subject will be on Compulsory Health Insurance. Anticipating this move, the National Physicians' Committee prepared what we have chosen to call the Debater's Package, and in it we have placed a good part of our literature and some specifically aimed at the youngsters, and those have gone out now to the extent of 111,000 pieces. In other words, 111,000 high school and junior college youngsters who are interested in debate have now received medicine's point of view expressed in NPC literature and aimed specifically at their level.

One of the important steps we have taken is the publication of this 196-page book entitled "Compulsion, the Key to Collectivism." Each of you has received a brochure telling about this book, which offered the book free of charge by filling out a card in that brochure. This is slightly out of the pattern of the normal activity of the NPC, this kind of distribution, because we customarily send to every member of the professions—the physicians, attorneys and dentists—our literature or publications free of charge. However, this is a costly book and deals with the hearings on S. 1606. Its seven pages of text point out the extensive developments that led up to the hearings and the great performance of the compulsory insurance, and the 125 following pages give illustrations that prove the facts stated in the text. If you have not asked for a copy, you may pick up one at the back of the room at the close of this meeting. I am fearful that the supply will be exhausted, and those of you who do not get one here, will you please drop us a note, fill out the coupon, send us a post card, call us up, any way at all, tell us you want it and we will be happy to send it free of charge.

In addition to the basic distribution to the professions, to you men who are leaders in organized medicine, if you can effectively distribute two or three or four of these copies, please ask for them and they will be sent gladly without charge.

The National Committee faces a new emergency. During the last few days of the Seventy-ninth Congress, the Reorganization Act of Congress was passed. In that Act, in Section 3 there is a provision that any organization who is active in defeating or in promoting the passing of legislation before the Congress must register with the Secretary of the Senate and report to the House, and report all contributions in excess of $500 that it receives, and report all expenditures in excess of $10.

The Board of Trustees of the National Physicians' Committee has determined to register under this Act and comply fully with its provisions. We move ahead now on a rather restricted basis until we have worked out the techniques and the mechanics of continuing our program under this new legislation.

Just one word, in two minutes, about the task ahead. During this Congress very strange things happened to you, the doctors of this country. First of all, you got the Hill-Burton Bill. You now have a means through which you and the people who are interested in hospital administration and the distribution of the physical facilities of medicine can move forward to provide for those areas in which there is still limited hospital and health center facilities.

Here again, I would like to emphasize the fact that medicine has an opportunity to lead in the same terms that Dr. Gruber spoke of, in the bituminous coal strike settlement. You have an opportunity in the Hill-Burton Bill to lead and to move forward to see that it is not abused and to see that by abuse you do not permit this country to be strapped into a further extension of centralized power over the health of this country.

You also have the Crosser Bill, providing for amendments to the Retirement Act and the Railroad Compensation Act. It provides sickness payments, indemnity payments to workers on transportation through the Railroad Retirement Board. In this law medicine was caught in a relative dilemma, because we have historically approved the cash payment to beneficiary. Although this historic approval would have gone to this bill, there were characteristics about the bill that certainly violate all the concepts upon which the independent practice has been built. I urge you to get a copy of it, read it, look at it, study it, and be prepared to deal with it when it becomes effective on January 1, 1947.

Again looking into the future, there will be another Wagner-Murray-Dingell Bill. There will be four states which will have a compulsory insurance bill, not only introduced vigorously, but fought for and activated by labor leadership. Your state is one. The state of Washington is another. The state of California is a third, and the state of New York is a fourth. In those legislatures after the first of January you can depend on a fight. You can depend on the fact that you are going to have a fight in the Congress of the United States beginning promptly after the first of January. It is going to be a difficult fight because it is going to take two patterns.

First of all, the infiltration system. There will be a Crosser Bill, a bituminous coal strike settlement, all these devious things to piecemeal take the place of the Wagner-Murray-Dingell proposal.

Second, you will have a Wagner-Murray-Dingell Bill proposal on the basis that it is the result of extensive hearings in the Seventy-ninth Congress, and having the advice and counsel of the medical people throughout the country, we present the people with a bill that has all the flaws kicked out of it and everybody will be happy within.

That is a tough fight. Both fights will be tough. I urge you gentlemen to give support to those agencies, to those parts of your own Society, your Public Rela- the other agencies attempting to deal with the legislations Program, the National Physicians' Committee, and the other agencies attempting to deal with the legislative threat and who are attempting to deal with the great

problem of class education in behalf of free medical practice. Thank you.

THE SPEAKER: Thank you, Mr. Stegen.

We shall now have the report of the Commission for the Study of Health Care. This Commission was created last year. Dr. Ralph H. Pino is Chairman. We shall hear from Dr. Pino.

VII. Report of Special Commission of House of Delegates on Study of Health Care, Plus Resolution

One year ago the House of Delegates authorized the naming of a Commission on Health Care, the purpose of which was to give consideration to the legal problems of irregular practice, and to related problems of distribution of health care facilities in the field of regular medicine which might need re-evaluation and development.

Your Commission wishes to report their findings in two categories:

A. On the legal status and other aspects of irregular practice.

B. Suggestions for modifying and increasing the distribution of medical care as arrived at from these studies.

SECTION A: THE LEGAL STATUS OF IRREGULAR PRACTICE.

The Council of the Michigan State Medical Society directed the Attorney of the Society, Mr. J. Joseph Herbert, to assist the Commission on Health Care in an investigation of the legal status of osteopathy and chiropractic as relates to the Basic Science Law and to Licensure, and we wish to report as follows:

1. It is the ruling of the Attorney General of this state that the doctor of medicine can use the term Doctor or its abbreviation preceding his name without qualifications. However, osteopaths, chiropractors, optometrists, and chiropodists may use the appelation doctor or abbreviation thereof providing that it is qualified by the type of work being done.

2. We believe, but we have not adequately proven for court procedure, that there have been flagrant violations of the law in licensing in the healing arts in this state, and we believe that consideration should be given, where the evidence seems to justify it, that these violations be brought to the attention of the Attorney General.

We suggest that test cases be tried in the courts. We believe that information on which to base these test cases can be found.

3. We recommend that the collaboration of doctors of medicine with osteopaths be not condoned, except in case of emergency in order to save life, as per recent ruling of the Council of the Wayne County Medical Society.

4. At the meeting with the President of the Basic Science Board, he reported that the Association of Basic Science Boards, a national organization, is working on the revision, simplification, and modification of the Basic Science Laws of various states. We recommend that the Michigan State Medical Society co-operate and support this organization's efforts with reciprocity in view.

5. Your Commission has no authoritative opinion as yet upon which to adequately judge of the legal right of osteopaths in Michigan to practice surgery, and therefore to compare action taken in Nebraska under their laws with the possibilities under Michigan laws; the Supreme Court of this state not having heretofore passed upon the question.

6. Your Commission has insufficient evidence or information upon which to advocate any course of procedure such as was advocated by the California Medical Association relative to a course ultimately intended to assimilate certain schools of irregular practice by modification of educational standards.

7. Your Commission concludes that the whole problem of irregular practice is an aspect of the whole great problem of the distribution of health services.

8. It concludes that as a corollary to the technical science of medicine that there is a science that needs to be defined and developed, to be known as "The Science of the Distribution of Health Services."

9. Your Commission is aware that the scope of its function has been such that we are not able to bring to you some conclusions loaded with action that you have hoped for. We believe however that there is an ultimate solution and that the implications are closely wrapped up in the great economic and scientific problem of Health Care Distribution.

10. We advise that these problems mentioned in this Part A of the report of your Commission on Medical Care be transferred to the Commission to be suggested in Part B of this report.

SECTION B: SUGGESTIONS FOR INCREASING THE DISTRIBUTION OF CERTAIN ASPECTS OF MEDICAL PRACTICE.

The war years have depleted to some extent the number of doctors necessary to care for the people, and though the return of men from the armed forces is filling the gaps again of civilian doctors of medicine, there is a lag in adequate numbers, and will continue to be, due in part to medical graduates having to serve in the Army and Navy for indefinite periods following internships. Added to this we are faced with increasing demands for more doctors in the United States as the need for medical and surgical care is increasingly brought to the attention of the people.

The medical schools can accumulate and process more students into doctors of medicine up to a certain degree, but to maintain even minimum standards there is a limit to this increase. The thinning of the civilian medical ranks during the war together with the people concurrently receiving greater income has made it possible for the irregular practitioners to increase in number and become far more active. The cost of the essential education of the regular medical students of our universities is high. These schools have state and municipal support and even so finances are insufficient. It is obvious therefore that the privately owned and operated schools of irregular practice cannot possibly meet standards above the cheapest type of education, and this is a point that the public should be made aware of on proper occasion.

The accelerated evolution of the science of medicine and surgery with all of the advantages of it in increased health and longevity creates a proportionate increase in cost. Michigan has been a leading state in working out ways and means of meeting some of this increased cost. However, we need to bear in mind that meeting the minimum cost through wage deductions alone will not give all the economic answers, just as medical practice through the Wagner Act or any other government act will not give all the economic or scientific answers. If we do not streamline our methods of application increasingly, as the practice of medicine advances increasingly from the simple to the complicated, we will continue to be in trouble from the standpoint of both economics and distribution.

Let us make a comparison of medicine and engineering. In 1900, only 46 years ago, we traveled with horses and buggies, and while it took a good wagon maker to make a wagon, the making of an automobile required a much different wagon maker. He had to have increased education, and he had to specialize, and as he specialized it took not one engineer but ten, and each had ten subordinates, and then the economic aspect along with the technical went from the simple to the complicated, and an executive had to be added to keep it all co-ordinated.

There were few who could qualify as automotive engineers but as the automobile developed and demands for it increased, while more men had to be educated in engineering as now in medicine, vastly greater numbers

had to be trained as technicians to assist under the direction of the engineers. Because of the training of these assistant technicians we can have automobiles in normal times not alone in great numbers, but at a price vastly less than could be possible if the highly trained engineers did most of the work themselves. Early in the automobile era advertising of travel possibilities and what it could mean to America began to appear as has happened in medicine, and gradually the idea of the inadequacy of the horse and buggy as a means of travel grasped the public consciousness, and with the evolution of the gas engine the concept of travel that had been built up in the minds of the public became a reality, and the automobile has become a necessity in most homes. The science of medicine like the science of locomotion has likewise advanced and has become a necessity in most homes. But have we kept pace with sufficient trained personnel to assist us to distribute our product, as modern society understands distribution? Has not scientific development plus education placed medical and surgical requirements and public demand far beyond the adequacy of the source of supply in terms of manpower in both medicine and dentistry?

Are we going to do our own executive directing? We have made a start in the directing, providing help in the way of financing and developing. Shall we demonstrate ways and means of executive development, not alone as in group practice but even in private practice, or are we going to have the way set up and directed from outside as Bernard Baruch and associates are pointing out to the public in physical medicine? Let us not forget that the old wagon maker was pretty much his own boss, but the modern, highly educated, highly specialized engineer is a cog in a great industrial wheel. He is bought and sold from one company to another as base ball players are bought and sold. A few are highly paid and quite independent—very few. Shakeups take place as recently took place in one of our great companies, and great numbers even of engineers feel the need of social security. That can happen to the highly developed engineers of medicine, but it ought not to and need not to. Medicine and surgery are personal problems that require personal application, but can be delegated to a degree that can preserve both the independence of the doctor of medicine and the personal health requirements of the people.

In every human endeavor when a new idea or a need appears on the horizon there are always those individuals and groups of individuals who try by some short cut to cash in on the basic truths laboriously arrived at and developed through painstaking and conscientious efforts, and so medicine has its irregulars, to say nothing of the quacks who try to cash in by shortcut methods. Here the comparison of medicine and the automotive industry differs somewhat, for a car either runs or it does not, it either stands on a firm financial basis or it does not, and it remains or disappears accordingly. But the practice of medicine involves a combination of mind and body loaded with intangibles, a combination of mechanics, of physics, of chemistry, of psychology, and of the pathology of all of these. Opportunities for a real circus are thus provided for the quack and the irregular practitioner, for he can devote his energies to exploiting the psychological and psychiatric intangibles all the way, and the distance is short from the advertisement of Lydia Pinkham and Pink Pills for Pale People to the courses in salesmanship purported to be given in schools of irregular practice.

In the field of medicine and surgery the quack and the irregular to a very large extent begin where we leave off. They pick up the loose ends and build public interest about them. We need to do our part more fully in making the irregulars live up to the law, but beyond this we need to provide all the aspects of health care for the people in the way we know it ought to be done, enlightening the people more through better public relations and education, then let the people be the judges of whom they will employ.

The Michigan State Medical Society is pioneering in the development of Michigan Medical Service, which is only in the early stages of its possibilities. In addition, from the standpoint of the distribution of medical care, Michigan can pioneer another and equally important phase of distribution and develop another "First." I refer to the need of the development of courses for the training of assistants in the form of technicians or medical associates to assist the doctor of medicine in such phases of health care as such associates can adapt to, in order that the skill and training of the doctor of medicine may become available to more people, and more completely within his practice.

This is not a new thought in the field of medical practice. Only an awakened consciousness of the need of organized interest and co-operation back of our medical schools is new. Twelve years ago the Council of Medical Education and Hospitals of the AMA made a survey of the schools teaching these subjects. The Council on Physical Therapy of the AMA, the American Congress of Physical Therapy, and the American Physical Therapy Association lent their combined co-operation in the preparation of the original standards. In 1939 the AMA published a list and requirements for approved schools for Physical Therapy Technicians. That list included sixteen different institutions including some of our leading universities, and fifteen hospitals. And now that he is gone, we must not forget that John Harvey Kellogg of Michigan, tried and succeeded as well as he could with our indifference, to bring some of the great lessons in physical therapy from Sweden and the Scandinavian countries to America.

Wayne University and the University of Michigan are putting forth effort in this auxiliary field in proportion as a grasp of the need and the organized effort of the dental and medical professions have understood and backed them up. We are told that in the field of the Dental Hygienist alone, that to every one such person as has been trained, three hundred could be used and at high wages. What of all the other associate aspects of medical care?

Nurses were among the first of medical associates. It is interesting that the training of nurses to assist the doctor met with much resistance. Dr. Olin West has stated that when he first began to practice there was much opposition to the training of nurses, the argument being that they would want to take over the practice of medicine, that if they were given training to do more than make beds and carry bed pans they would want to do blood letting and apply leaches. Medicine opposed even nursing during the lifetime of, and in the experience of, the present President-elect of the American Medical Association. Since then nursing has become an indispensable auxiliary of the practice of medicine. Clinical laboratory technicians, x-ray technicians, dietitians, and the dental hygienist have come to stay. How could the public pay for the surgeon to do his own blood count, urinalysis, and other such procedures before every operation, and what an extravagance it would be of the doctor's time.

There are other classes of technicians undeveloped within the field of medicine that our medical schools and universities should next given attention to, fields of health care among our loose ends which have been taken over by others and which by others are being exploited and expanded a little at a time into the whole field of the practice of medicine. The public calls these irregular practitioners "doctors" and that will continue until the science of the distribution of medical care by the regular doctors of medicine catches up with the technical science of medicine for it is an inseparable corollary if we are to keep the practice of medicine modern.

Physical Medicine includes massage, electrotherapy, thermotherapy, hydrotherapy, and other aspects of medical care around which the irregular schools have built their unsound practices of all aspects of medicine. Schools of Medical Associates should include all aspects of

physical medicine appropriate to be handled under the direction of the doctor of medicine. Such auxiliary institutions to the colleges of medicine and dentistry should provide a source of supply of such technicians available to the doctor of medicine and dentist either in single practice or in groups. Many orthopedic surgeons are using massage and physical therapy. Most of us are letting our patients go where they will, directed by the largest neon sign.

Schools of Medical Associates should include so-called Chiropody for the care of the feet. Detailed, not casual, knowledge of the care of the feet is quite as important as the care of the teeth and should be taught in our medical schools. The minor ailments of the feet, ailments which are major from the standpoint of comfort and efficiency, should be handled in the doctor's office. If the amount of work handled by the chiropodists of this country were spread out into the laboratories of our orthopedic surgeons and dermatologists through the supervised employment of medical associates, as these men now supervise their laboratories, the field would then not be half covered. Chiropodists are working overtime in their own offices, taking appointments weeks in advance, and doing everything from the treatment of corns to major surgery. The people go to them and call them "doctor." Foot hygiene and therapy is very important. It is a combination of the specialities of orthopedics and dermatology. To belittle the subject and to say that if the people had any sense and wore proper shoes there would be less trouble with their feet, and therefore they do not deserve the attention of the doctor of medicine, is like saying the people should not get syphilis in the first place, and therefore we will let them go where they will. And to assume, as some doctors of medicine do, that chiropodists are only manicurists of the nails of the feet is to reveal ignorance of the fact that the chiropodist is a surgeon and that the chiropodist practices medicine and surgery. This work should be done under the supervision of the doctor of medicine, as logically and with as much satisfaction both to himself and the patient, as the dental hygienist serves the dentist. He could well be called an orthopedic hygienist. Let us remember that we expect the people to look to us for direction in all matters of health care. Shall another layman or Bernard Baruch have to arise from the ranks of laymen to point out our duty to us in the field also of foot care?

And included in the Schools of Medical Associates should be the subject of Optics. From high in the office buildings to the basement of department stores, from corners of jewelry stores to booths on the street, optometrists are being called "doctor," and millions of the public think they are doctors of medicine. They are examining eyes, fitting glasses, and putting in drops, drops of murine, boric acid, and plain water. The patient thinks he is being examined, diagnosed, and treated, and when he goes blind from glaucoma that glasses and murine do not cure, he tells of the "doctor" he has been to, and the connotation is that he is a doctor of medicine. We have some doctors of medicine, whose understanding of organization is so poor that they would teach these men in jewelry stores to diagnose disease, the idea being that it would increase medical distribution, or perhaps cover up our own failure to take care of the people.

We, the doctors of medicine, are to be blamed for the optometrists, if there is any blame. We are not doing the work ourselves. We are highly trained engineers doing what we can ourselves, but unlike the automotive engineers, do not supervise enough tool makers and other assistants to take care of three patients under the supervision of the doctor of medicine instead of one. Of course, in the very process of the people learning that they need eye care, they will complain that they can't get it and they will vote for the politicians who hope to provide it in the form of the Wagner Act and the like.

In all of this consideration of the need of the development of Medical Associates, let us remember also that the very nature of the work of the doctor of medicine is such that to a very great degree he is as successful as he is skillful, and he is in large part as skillful as he is experienced. The professor at the head of a department and a clinic in a medical school has his experience multiplied by the number of the hands and the skill of all who assist him. He does not depend upon his own two hands alone, and so his experience and skill is multiplied. He can devote his attention and his skill to the more important thinge while watching and directing those with less educational requirements, but who nevertheless through experience become minutely skillful, thus advancing the success of the whole.

This type of organization need not apply only to the professor in a medical school and clinic. It is as applicable to the clinic of the doctor of medicine with offices in the city, and to the practitioner in the remote village. And let us remember also that, as with the making of the automobile, medical care becomes less costly to the patient and more complete as the doctor organizes his business to delegate, but to supervise, certain services. And at the same time that he cares for more people and more satisfactorily to all concerned, he enhances not alone his own skill but his own income, and while doing so, he gives employment to associates with good income. The people would rather come to regular doctors than to the irregulars when they learn the truth. By this method the people will support fewer and fewer irregulars, and the irregulars and their schools will become fewer and fewer and fewer constantly to the best health interests of all of the people.

What is the answer? May our universities not develop Schools of Medical Associates to work with and under the direction of the doctor of medicine, as does the nurse, the clinical laboratory technician, the x-ray technician, and the dental hygienist? In the present state of the evolution of Medical Associates, the following divisions are clearly defined, and many others will follow.

I. The Division of Clinical Laboratory Assistants.
II. The Division of Dental Hygiene.
III. The Division of Dietetics.
IV. The Division of Medical Secretaries and Librarians
V. The Division of Medical and Surgical Art and Photography.
VI. The Division of Occupational Therapeutics.
VII. The Division of Ophthalmic Associates.
VIII. The Division of Nursing.
IX. The Division of Orthopedic Associates.
X. The Division of Physical Medicine.
XI. The Division of X-Ray Technicians.

What a galaxy of educational opportunities to lay in bulletin form before the high school and college student in choosing a vocation! The medical profession has been so careful and properly so, of advertising what it has to offer, that on the library tables of our schools—announcements, bulletins, and catalogues of the schools of irregular and questionable practice are attractively displayed, while one has to seek diligently to find at all what we have to offer in thick catalogues. Then it is barely outlined and buttressed with so many requirements that if found at all, it is largely ignored. With the crying need for nurses, we found one of our largest hospitals without even a catologue, and they have been without one for several years!

We must educate more young men in the field of medicine, and for every one we must educate at least one medical associate, and our judgment is that it will require several. It is much more satisfactory to use this kind of added help and in large numbers in the aggregate than great numbers of government clerks, in increasing medical care. Many of us now use several medical associates. When the automotive engineer makes all the car himself, and the doctor buys such a car, if he can, then we can expect to go on and do all the work

ourselves, and the people will employ us if they can. Shall we keep up our end in a progressive world? Or do we lack organizing ability? If we do not streamline our business it will be streamlined for us by people who do not know how.

But some may ask isn't it a fact that our medical schools already exceed the budget provided by the universities? Probably so, but when business discovers the possibility and the use of plastics or of refrigeration, our universites put in courses in these. The medical profession must present this problem squarely, intelligently, and realistically to our universities. We must back up the Deans of our Medical Schools, and not leave the problem of getting budget increases wholly to them. It is our problem if we hope to direct methods of medical distribution. Through proper public relations which in turn creates public opinion, the taxpayers are willing to support education that gives value received. It supports a lot of education that gives doubtful value received as compared with health care.

We must assume the responsibility for ways and means of caring for the health interests of the people. We must work and supervise work, or we will work and be supervised. Our public relations may be better if we give more emphasis to what we will do, and less emphasis to what we will not do, both in science and economics. Rather than to condemn the Sister Kenny treatment, to say that we will investigate it and use all of it that research proves to be good, is both good public relations, and good medicine. Let Michigan provide another "First"!

Your Commission on Health Care presents certain exhibits for the purpose of visualization. It is a very limited example of the extensive material available in the development of schools of "Medical Associates," having in mind that such schools do not have to be housed in single buildings, but that under the direction and leadership of our medical schools, all the facilities available, now in process of teaching, and to be developed, from hospital facilities to university class rooms and laboratories, can form the nucleus of Schools of Medical Associates.

Your Commission on Health Care therefore presents the following Resolution

Resolution:

WHEREAS, The science of medicine has so advanced and the possibilities of its application have become so increasingly extensive,

WHEREAS, This places not only increasing responsibilities and opportunities on the General Practitioner but also requires increase constantly in new specialties and in the responsibilities and opportunities of these specialists,

WHEREAS, Such advance makes increasingly possible better actual and potential health care of the people and is the essential factor in increased longevity,

WHEREAS, The application of extensive scientific principles of medicine and surgery can be comprehensively, adequately, and safely carried out only by or under the direction of those basically and specifically trained through modern medical education,

WHEREAS, This medical education requires necessarily many years and great expense,

WHEREAS, If modernly applied this makes medical care under any system whatever increasingly expensive if distribution is not scientifically modified,

WHEREAS, With all the long and expensive basic training and developed skills, the doctor of medicine has but two hands with which to distribute medical care,

WHEREAS, This fact limits his opportunities not alone in distributing the skills that he has developed at so great a cost in time and effort, but limits also the opportunities of accelerated development of his skills,

WHEREAS, Experience has now accumulated, demonstrating that under the direction of the doctor of medicine through medical associates, the distribution of medical care can be immeasurably enhanced and at less cost, because of less cost in the education of such associates,

WHEREAS, Some therapeutic procedures of limited value have been exploited by groups basically untrained but calling themselves "doctor" and confusing the public mind in problems of health care,

WHEREAS, We should be in position through research and personnel under the direction of the medical profession to search for, examine, and bring to the people every vestige of possible or proved additions to health care,

WHEREAS, Young people in our colleges and universities are looking for vocational opportunities, and such opportunities can be most attractively further organized and catalogued for their choice in association with the medical profession,

WHEREAS, The science of the distribution of health care has become a necessary corollary of the theory and practice of scientific medicine, therefore,

BE IT RESOLVED, That the Michigan State Medical Society in co-operation with the Universities of the state of Michigan, set up an over-all Commission to be known as "The Commission for the Study and Development of the Science of the Distribution of Health Care," and,

BE IT FURTHER RESOLVED, That the various schools and teaching facilities of Medical Associates now in existence and in the process of formation, can be so organized and catalogued as to furnish the medical profession such assistance as to make increasingly the science of the distribution of medical care along with medical science, more comprehensive, usable, and effective.

This can be one answer to better public relations. It can help to make it unnecessary for the people to seek counsel of irregular practitioners.

THE SPEAKER: Thank you for this report. The resolution will be referred to the Reference Committee on Resolutions.

Are there further resolutions?

VIII. Resolutions

VIII—1. MEDICAL VETERANS' PRIORITY IN PURCHASE OF SURPLUS SUPPLIES

DOUGLAS DONALD, M.D. (Wayne):

WHEREAS, In setting up medical offices it has been difficult for veterans to purchase essential equipment from the usual private sources; and

WHEREAS, There is considerable medical surplus property which was used by medical installations of the Armed Forces during the war and which is now stored in warehouses; and

WHEREAS, Since there is a shortage of practicing physicians, it is necessary for the public health that the medical veterans be properly equipped to serve their patients; and

WHEREAS, Veterans have priortty for surplus medical material, therefore be it

RESOLVED, That the Michigan State Medical Society be asked to request the governmental agencies concerned to simplify the entire procedure for obtaining surplus property in order that all former officers of the Medical Corps may be given priority in purchase of available medical equipment.

THE SPEAKER: This resolution will be referred to the Committee on Resolutions.

VIII—2. MEDICAL VETERANS' AFFAIRS—CREATION OF MSMS COMMITTEE ON

E. D. SPALDING (Wayne): I have here a resolution also concerning the veterans.

WHEREAS, The aftermath of the war has left many problems affecting veterans, some of which are of vital concern to the medical profession and are likely to require action on a state level; and

WHEREAS, Veterans' affairs are certain to increase in importance with each succeeding year; and

WHEREAS, The best interests of the medical profession will be served only if veterans' problems are under constant study and the latest information is available on the numerous ramifications of such problems; and

WHEREAS, It would appear that the most efficient method for the Michigan State Medical Society to achieve these ends and also to maintain adequate liaison with the Veterans Administration and Veterans Organizations on matters of medical policy is by means of a special committee, therefore, be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society favors the appointment of a State Veterans' Affairs Committee; and be it further

RESOLVED, That the members of such a committee should be composed of veterans.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—3. AMA CONTRIBUTION TO HEALTH EDUCATION PROJECTS

R. W. TEED, M.D. (Washtenaw): I have been instructed to present this resolution by the Council of the Washtenaw County Medical Society.

WHEREAS, The Michigan State Medical Society has supported a program of Health Education during the past five years, and

WHEREAS, Such Health Education is not purely of local, but also of national interest and value, therefore, be it

RESOLVED, That the delegates of the Michigan State Medical Society to the American Medical Association be instructed to initiate a study of a policy by which the American Medical Association would contribute a portion of the cost of such a program of Health Education carried on by any State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—4. RECOGNITION OF VALUABLE SERVICE TO MEDICINE BY DR. H. A. LUCE

W. W. BABCOCK, M.D. (Wayne): I would like to make a remark prior to introducing this first resolution. I feel highly honored in being delegated to offer this resolution to the House.

WHEREAS, For eighteen years Dr. Henry A. Luce has been an able and conscientious delegate from the Michigan State Medical Society to the National organization. During the past summer Dr. Luce addressed a letter to the Wayne County delegation in which he asked that he should no longer be considered a candidate for that post. In his letter he expressed his ideas of the qualifications of a delegate, and

WHEREAS, In reading them one is conscious of the high degree in which Dr. Luce's services as a delegate were a living exemplification of these qualifications. To quote in part—"He should be one who holds the fundamental principles and ethics of the profession as his basic characteristics." "He should place the good of the whole above his personal desires." These words well describe the man who now asks to be allowed to step aside; a man who has always justified the confidence we have placed in him, and

WHEREAS, Because of the unselfish service which he has given our State Society and the entire profession, and because we desire to express in some measure our recognition of his work,

BE IT RESOLVED, That the Michigan State Medical Society does hereby thank Dr. Luce for his many years of work as a delegate, and expresses its regret that he feels his work in this capacity must end, and

BE IT FURTHER RESOLVED, That a copy of these resolutions be sent to Dr. Luce.

THE SPEAKER: This resolution will be referred to the Reference Committee on Officers' Reports.

VIII—5. MEDICAL OFFICERS' PROCUREMENT BY RATIO

W. W. BABCOCK, M.D. (Wayne): Another resolution.

WHEREAS, During World War II the American Medical Profession unhesitatingly answered the call of the Armed Forces for medical personnel and abided by their decision as to the number of physicians needed; and

WHEREAS, More than one-third of the entire medical profession entered the armed services leaving a dangerous scarcity of physicians to care for the civilian population; and

WHEREAS, In planning for any future national emergency the health requirements of the civilian population must be given greater consideration because of the greater likelihood of enemy action against our industrial centers; and

WHEREAS, The medical personnel requirements for the Armed Forces in World War II were on the basis of 7.5 medical officers per 1,000 men or one for every 133 men; and

WHEREAS, It is the general belief of medical veterans that this ratio could be materially reduced if medical officers were used solely where their professional training and experience was justified and were replaced by Administrative Officers in all duties where medical knowledge was not essential, and if more efficient methods of employment of medical officers were devised; therefore

BE IT RESOLVED, By the House of Delegates of the Michigan State Medical Society that, in their opinion, the Armed Forces should consider doctors of medicine as a national resource, highly limited in numbers, that must be carefully husbanded in time of war and therefore urges the Surgeons General of the Army and Navy to consider in their future planning the foregoing facts with the end in view of revising their estimates of need for medical officers and by establishing such auxiliary services as the Medical Service Corps, substantially reduce the ratio of medical officers required in time of war; and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the President of the United States, the Secretaries of War and Navy, the Surgeons General of the Army and the Navy, the Chairman of the Senate and the House Military Affairs Committee and to each Congressman and Senator from Michigan.

THE SPEAKER: That will be referred to the Reference Committee on Resolutions.

VIII—6. STATUS OF SURGEONS-GENERAL

WILLIAM BROMME, M.D. (Wayne): The text of the following resolution was prepared by the American Veterans of World War II, and referred by the Delegates of Wayne County to this delegation for its consideration.

WHEREAS, Approximately 10 per cent of the personnel of the Army are members of the Medical Department, and

WHEREAS, In modern warfare, the care of the sick and wounded and the many ramifications of evacuation and hospitalization are major factors in the success of land or amphibious operations; and

WHEREAS, Food, clothing and supply have important and far-reaching medical aspects; and

WHEREAS, In the past because the Surgeon General of the Army has been limited to offering technical advice only, the use of his broad experience has not been fully utilized in the formulation of major plans and training, therefore

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society strongly urges that the Surgeon General of the Army and of all other divisions of National Defense be made a member of the General Staff with a status co-equal to that of other major subdivisions of the General Staff; and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to the President of the United States, to each member of Congress and to each Senator from Michigan, to the Chairman of the House and the Senate Military Affairs Committee, to the Secretary of War, and to the Surgeon General of the Army.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—7. ESTABLISHMENT OF GENERAL PRACTICE SECTIONS IN APPROVED HOSPITALS

ARCH WALLS, M.D. (Wayne):

WHEREAS, The House of Delegates of the American Medical Association has established an individual section on the General Practice of Medicine; and

WHEREAS, The General Practitioner has been recognized as a separate branch in the medical profession; and

WHEREAS, This group has shown its interest in its Section by registering 939 members in the Section at the 1946 American Medical Association meeting in San Francisco; and

WHEREAS, Their scientific section meetings were well attended; and

WHEREAS, The House of Delegates has already voiced its approval of such sections in the separate state and county societies that are component parts of the American Medical Association; and

WHEREAS, Sections on General Practice have been started in some recognized hospitals that are approved by the American College of Surgeons and the Council on Medical Education, and Hospitals have been accepted by these bodies; and

WHEREAS, many hospitals have not established General Practice Sections in their visiting active staffs and their governing heads are doubtful whether such action has the approval of the bodies which set up the rules and regulations for the approval of their hospitals for interns and residents; therefore,

BE IT RESOLVED, That the Delegates of the Michigan State Medical Society in convention assembled voice their approval of the establishment of Sections of General Practice in approved hospitals and that the Delegates from Michigan to the American Medical Association House of Delegates introduce a similar resolution at the next meeting requesting approval of that body; and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the Hospital Committee of the American College of Surgeons with a request that their body voice approval of such Sections and include such in their Manual of Hospital Regulations.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS EMERITUS, LIFE, ASSOCIATE, RETIRED

J. J. LIGHTBODY (Wayne): These resolutions have to do with special memberships in the Michigan State Medical Society.

WHEREAS, The following doctors have attained the age of seventy years and have maintained active membership in good standing for ten years or more in the Wayne County Medical Society and the Michigan State Medical Society, he it, therefore,

RESOLVED, That Drs. Bruce Anderson, Joseph H. Andries, Robert Beattie, Noah Aronstam, W. E. Blodgett, Harry J. Butler, Maria B. Coolidge, Duncan A. Campbell, Henry W. Cadieux, James H. Dempster, H. C. Emmert, William F. Hamilton, Joshua Hanser, A. Hughes, J. P. Jaeger, William J. Jend, G. B. Lowrie, Willard Monfort, John B. Morton, R. Johnston Palmer, Walter G. Paterson, C. F. Pequegnot, Charles A. Reinbolt, E. O. Sage, Robert Shaw, W. J. Stapleton, R. S. Taylor, W. E. Tyson, A. B. Wickham, and Walter J. Wilson, Sr., be transferred to Life Members' Roster by election in the House of Delegates.

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, John D. Boehm, M.D., West Branch, Michigan, has retired from active practice of medicine; and

WHEREAS, Dr. Boehm has maintained his membership in the Michigan State Medical Society for a period of ten years as prescribed by the By-laws; and

WHEREAS, The Council of the Wayne County Medical Society has accredited Dr. Boehm with special membership recognition, therefere, be it

RESOLVED, That the name of John D. Boehm, M.D., be placed on the list of retired members of the Michigan State Medical Society.

THE SPEAKER: This resolution will go to the Reference Committee on Amendments to the Constitution and By-laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, E. Hobart Reed, M.D., is temporarily out of active practice on account of protracted illness; be it therefore

RESOLVED, That Dr. Reed be placed on Associate Membership files of the Michigan State Medical Society for the period of his illness.

THE SPEAKER: This will also go to the Reference Committee on Amendments to the Constitution and By-laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, The following doctors are all Honor Members of the Wayne County Medical Society, and

WHEREAS, These doctors have all engaged in the active practice of medicine for fifty years and have been members in good standing of the Michigan State Medical Society for twenty-five years or longer as prescribed in the By-laws; therefore, be it

RESOLVED, That Drs. Alexander Cruikshank, Karl Dubpernell, Hugh Harrison, Arthur Northrop, Edward J. Panzner, Burt Shurly, and Alexander Thomson be elected by the House of Delegates to Emeritus Membership in the Michigan State Medical Society.

THE SPEAKER: This resolution will also go to the Reference Committee on Amendments to the Constitution and By-laws.

VIII—9. THE HUMANE USE OF ANIMALS FOR SCIENTIFIC PURPOSES

B. H. Douglas, M.D. (Wayne): From time to time the medical profession must protect certain of the rights that it has carried out over a period of years through the problem of having available animals for the use of scientific experimentation. We have been threatened again in Michigan with interference with this right, and it is therefore timely that we present the following resolution. Tomorrow a case comes up in Detroit that will, if the ones bringing the suit are successful, stop the use of dogs in experimental work in our two great universities to a very large degree, by interference with the sale of dogs from the Detroit Dog Pound for scientific purposes.

Therefore, I present this resolution with the recommendation from the Delegates of Wayne County.

Whereas, The maintenance of standards of health and the treatment of the sick is the obligation of the medical profession; and

Whereas, Medical progress is dependent upon research for fundamental knowledge relating to the eradication of disease; and

Whereas, The present high standards of medical care are largely dependent upon the humane use of animals for the purpose of furthering our knowledge of disease, for the standardization of drugs, for normal teaching procedure and for diagnosis; and

Whereas, There is an effort on the part of erroneously informed individuals to interfere with the orderly and necessary humane use of animals for experimental purposes; be it therefore

Resolved, That the Michigan State Medical Society formally protests any interference with the humane use of animals for experimental purposes.

The Speaker: This resolution will go to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

D. B. Wiley, M.D. [Macomb]: Resolution regarding membership.

Whereas, James E. Curlett, M.D., of Roseville, Michigan, having reached the age of 76, has been a member in good standing of the Michigan State Medical Society for 30 years, and

Whereas, Dr. James E. Curlett has been granted an Honorary Life Membership in the Macomb County Medical Society, and

Whereas, Dr. James E. Curlett has represented the Macomb County Medical Society in the House of Delegates of the Michigan State Medical Society, be it therefore

Resolved, That the Macomb County Medical Society submit the name of James E. Curlett, M.D., to the House of Delegates of the Michigan State Medical Society for Life Membership in the Michigan State Medical Society.

The Speaker: This resolution will go to the Reference Committee on Constitution and By-laws.

VIII—8. SPECIAL MEMBERSHIP

Alvin Thompson (Genessee): I have some resolutions concerning membership.

Whereas, Oscar W. McKenna, M.D., Flint, Michigan, has practiced medicine for fifty years and has maintained membership in good standing for more than twenty-five years, be it

Resolved, That Oscar W. McKenna, M.D., be placed on the Emeritus Membership list of the Michigan State Medical Society.

* * *

Whereas, James A. Baird, M.D., Flint, Michigan, has practiced medicine for fifty years and has maintained membership in good standing for more than twenty-five years, be it

Resolved, That James A. Baird, M.D., be placed on the Emeritus Membership list of the Michigan State Medical Society.

* * *

Whereas, James Houston, M.D., of Swartz Creek, Michigan, has attained the age of seventy years and maintained an active membership in good standing for more than ten years, be it

Resolved, That James Houston, M.D., be placed on the Life Membership roster of the Michigan State Medical Society.

The Speaker: These resolutions will go to the Reference Committee on Amendments to the Constitution and By-laws.

Milton Shaw, M.D. (Ingham): Ingham County Medical Society submits the following nominations for emeritus and life membership in the Michigan State Medical Society. The physicians nominated qualify according to the requirements of the Michigan State Medical Society:

For emeritus membership: C. P. Doyle, M.D., of Lansing, Gertrude O'Sullivan of Mason, and Thomas Sanford, M.D., of Lansing.

For life membership: Frank Dunn, M.D., and Fred Seger, M.D., both of Lansing.

The Speaker: These resolutions will be referred to the Reference Committee on Constitution and By-laws.

VIII—10. SECTION ON UROLOGY

R. S. Breakey, M.D. [Ingham]: Resolution relative to the establishment of a Section on Urology of the Michigan State Medical Society.

Whereas, There have been recognized and approved by the Michigan State Medical Society eight specialty sections with scheduled meetings at the time of the annual meeting of the entire Society; these sections embracing the following specialties: Ophthalmology and Otolaryngology, Dermatology and Syphilology, Radiolgy, Anesthesia and Pathology, Surgery, Pediatrics, Gynecology and Obstetrics, Internal Medicine, and General Practice, and

Whereas, Urology is a specialty separate and distinct from these mentioned, and

Whereas, There has not until the present been established a Section on Urology of the Michigan State Medical Society, and

Whereas, Such a section is active and beneficial to all in the American Medical Association and many other state medical societies, and

Whereas, It has been brought to the attention of the urologists of the Michigan State Medical Society that the American Urological Association urges this proper representation of the urologic field in this state society, and

Whereas, Such a section would be mutually advantageous to both the urologists and the general practitioners; therefore, be it

Resolved, That we respectfully submit for your careful consideration, recognition of the field of urology by the establishment of a section to be known as the Urologic Section of the Michigan State Medical Society.

The Speaker: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

E. A. Oakes, M.D. (Manistee): Mr. Speaker, here are two special memberships to be presented from Manistee County.

Whereas, Harlan MacMullen, M.D., has been an active member of the Manistee County Medical Society in good standing for forty years and is now retired, he it, therefore,

Resolved, That he be elected to retired membership.

* * *

Whereas, Lee A. Lewis, M.D., has been in practice for over fifty years, and is a member in good standing of the Manistee County Medical Society and fulfills all the necessary requirements for Member Emeritus, be it therefore

Resolved, That he be elected to such membership.

The Speaker: The resolutions will be referred to the Committee on Constitution and By-laws.

W. B. Mitchell, M.D. (Kent):

Whereas, The Following members of the Kent County Medical Society, namely: George H. Bauer, M.D., Alexander M. Campbell, M.D., Robert J. Hutchinson, M.D., Reuhen Maurits, M.D., Mortimer E. Roberts, M.D., have fulfilled the requirements for eligibility as emeritus members of the Michigan State Medical Society and whose eligibility has been certified by the Secretary of the Michigan State Medical Society, and

Whereas, The following members of the Kent County Medical Society, namely: Elton P. Billings, M.D., Charles W. Brayman, M.D., Jacob D. Brook, M.D., Louis Chamberlain, M.D., William J. DuBois, M.D., John Kremer, M.D., Peter J. Kriekard, M.D., George F. Lamb, M.D., William D. Lyman, M.D., Albert Noordeweir, M.D., and Clyde C. Slemmons, M.D., have fulfilled the requirements for eligibility as Life Members of the Michigan State Medical Society and whose eligibility has been certified by the Secretary of the Michigan State Medical Society. All of the above named men have been recommended for such memberships by a vote of the Kent County Medical Society, therefore, be it

Resolved, That they each be elected to the special memberships designated.

The Speaker: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

* * *

A. H. Miller, M.D. (Delta-Schoolcraft):

Whereas, Dr. Clayton Willison, of Chippewa-Mackinac County, has been in practice more than fifty years and been in the Medical Society for more than twenty-five years, we respectfully petition the House of Delegates that he be made an emeritus member.

The Speaker: This resolution will be referred to the Reference Committee on Constitution and By-Laws.

A. B. Gwinn, M.D. (Barry):

Whereas, Dr. Robert Harkness has reached the age of seventy-one years and has been an active member of the Michigan State Medical Society for more than ten years and

Whereas, Dr. Harkness is retired from active practice, therefore, be it

Resolved, That Dr. Robert Harkness be admitted to life membership in the Michigan State Medical Society.

The Speaker: This will be referred to the Reference Committee on Constitution and By-laws.

VIII—11. CO-OPERATION WITH NURSING AGENCIES TO SOLVE PROBLEMS OF NURSE SHORTAGE

W. B. Cooksey, M.D. (Wayne):

Inasmuch as there exists today a critical lack in graduate nurses in the State of Michigan and throughout the nation;

Inasmuch as the schools of nursing have only one-tenth to one-half the enrollment they should have to meet current needs; and

Inasmuch as this shortage of nursing care may lead to a reduction of existing hospital beds, the supply of which now available does not meet the public demand; and

Inasmuch as the Michigan Council on Community Nursing and all local component councils which have representation from organized medicine, the State Hospital Association, organized nursing, and the public have been given the responsibility of studying this problem and instituting ways and means of overcoming this situation; and

Inasmuch as the Michigan State Nurses Association, in co-operation with the Michigan State Hospital Association, has already

established minimum personnel practices including wages, hours of work, vacations and other matters directly concerned with personnel practices; and

INASMUCH as organized nursing has already developed training programs for subsidiary workers to assist in the care of patients to give the best possible distribution of trained nurses; and

INASMUCH as committees of organized nursing are studying all phases of nursing education to attract young women into this field; therefore,

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society instruct the Nursing Committee of the Michigan State Medical Society to co-operate with the existing nursing agencies concerned with this problem; and

BE IT FURTHER RESOLVED, That the House of Delegates consider an appropriation to assist in the public relations aspect of this problem.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

R. J. ARMSTRONG, M.D. (Kalamazoo):

WHEREAS, The following members of the Kalamazoo Academy of Medicine have attained the age of seventy years and have maintained active membership in good standing for more than ten years in the Kalamazoo Academy of Medicine, be it therefore

RESOLVED, that they be transferred to the Life Members' Roster of the Michigan State Medical Society: William N. Kenzie, M.D., Roscoe F. Snyder, M.D., Burt D. Walker, M.D., Ray Thomas Fuller, M.D., and Herman A. Rigterink, M.D.

* * *

WHEREAS, the following are honored members of the Kalamazoo Academy of Medicine: William E. Shackleton, M.D., Leslie H. S. DeWitt, M.D., and George H. Caldwell, M.D., and

WHEREAS, They have maintained their membership in the Kalamazoo County Society for a period of more than ten years and have retired from practice, be it therefore

RESOLVED, That, on recommendation of the Kalamazoo Academy of Medicine, they be transferred to the Retired Members' Roster of the Michigan State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

VIII—12. MEDICAL VETERANS REMISSION OF DUES (MSMS)

Are there further resolutions?

D. C. SOMERS, M.D. (Wayne):

WHEREAS, Returning medical veterans have been faced with innumerable problems and considerable expense in re-establishing their practices; and

WHEREAS, The majority of medical veterans have had their incomes considerably curtailed for the past several years; and

WHEREAS, The medical veterans are anxious to maintain their affiliation with the State Medical Society; therefore, be it

RESOLVED, That the Medical Veterans of World War II express their very sincere appreciation to the Michigan State Medical Society for its remission of dues granted to the Medical Veterans.

THE SPEAKER: This resolution will go to the Reference Committee on Resolutions. Are there further resolutions?

VIII—13. MEMORIAL TO JAMES D. BRUCE, M.D., DECEASED

H. H. RIECKER, M.D. (Washtenaw): The Washtenaw County Society asked me to present the following resolution:

WHEREAS, The House of Delegates of the Michigan State Medical Society regrets the recent death of the late Dr. James D. Bruce, and

WHEREAS, Dr. Bruce was an outstanding practitioner of medicine and surgery in his home town of Saginaw for many years, and

WHEREAS, In his later years, he ably served as a member of The Council of the Michigan State Medical Society for three successive terms, and

WHEREAS, His untiring devotion to the cause of medical education resulted in the placing on a firm footing of the postgraduate medical education program of the Michigan State Medical Society and

WHEREAS, His influence was instrumental in establishing the Children's Clinics at Marquette and Traverse City, therefore,

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society register its grief and extend its deep sympathy to Mrs. Bruce and family at the loss of such an outstanding member, and express its appreciation of his services to the principles of organized medicine, and

BE IT FURTHER RESOLVED, That a copy of this resolution be spread on the minutes of the House of Delegates and a copy transmitted to Mrs. Bruce.

THE SPEAKER: This resolution will be referred to the Reference Committee on Officers' Reports.

VIII—14. ASSESSMENT ($25) FOR PUBLIC RELATIONS AND PUBLIC EDUCATION

H. H. RIECKER, M.D. (Washtenaw):

WHEREAS, Much progress has been made by the Michigan medical profession in effecting wider distribution of quality medical care; and

WHEREAS, Continued public education is necessary to continue and extend programs which have made for the better health of the people such as we have begun; and

WHEREAS, $10 was appropriated in 1944 and $10 in 1945, and $25 in 1946 for the purposes of public education and all has been allocated except a reserve fund for exigencies; and

WHEREAS, A necessarily comprehensive program has been scientifically prepared and developed to meet the greater problems anticipatd in 1947, and

WHEREAS, In 1947 the need will be more acute because it is a legislative year; and

WHEREAS, The public education-public relations program has shown great progress and will continue to grow, and financial provision must be made in advance to meet the requirements of the contemplated program, therefore, be it

RESOLVED, That a per capita assessment of $25 be levied for the year 1947 for purposes of public education and public relations.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

LUTHER W. DAY, M.D. (Hillsdale):

WHEREAS, Each of the following members is now over seventy years of age and has been a member of the Hillsdale County Medical Society for more than ten years, the Hillsdale County Medical Society requests the House of Delegates to extend the privileges of life membership in the Michigan State Medical Society to—Harry Clay Miller, M.D., Henry Franklin Hughes, M.D., and Elihu Arthur Martindale, M.D.

THE SPEAKER: These resolutions will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

THE SPEAKER: Is there a further resolution?

If not, we will proceed now with the reports of the standing committees.

IX. Amendments to Constitution & By-Laws

IX—1. RE LIFE MEMBERSHIPS

D. W. THORUP, M.D. (Berrien): Mr. Speaker and Members of the House of Delegates: "Whereas, Article III, Section 8 of the Constitution of the Michigan State Medical Society, re 'Life Members' does not adequately serve the best interests of the Michigan State Medical Society and does not confer upon its members the honor intended; therefore be it

RESOLVED, That Section 8 of Article III, of the Michigan State Medical Society Constitution be deleted."

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

X. Reports of Standing Committees

X—1. LEGISLATIVE COMMITTEE

Is there a supplemental report of the Legislative Committee?
If not, it will stand as on page 48 in the Handhook.

X—2. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE

Committee on Distribution of Medical Care. Is there any report?

X—3. ETHICS COMMITTEE

Is there a supplemental report from the Committee on Ethics?
If not, the report will stand.

X—4. MEDICO-LEGAL COMMITTEE

Medico-Legal Committee. Any supplementary report?
If not, it will stand the same as on page 49.

X—5. PREVENTIVE MEDICINE COMMITTEE

Preventive Medicine Committee. Any supplementary report?
If not, it will stand as on page 50.

X—6. CANCER CONTROL COMMITTEE

The Cancer Committee. Any supplementary report?
If not, it will stand as on page 51.
We will ask Dr. DeTar to take the chair.
(J. S. DeTar, Vice Speaker, took the chair.)

X—7. MATERNAL HEALTH COMMITTEE

THE VICE SPEAKER: Is there a supplemental report of the Maternal Health Committee?
If not, it will stand as in the Handbook.

X—8. VENEREAL DISEASE CONTROL COMMITTEE

Is there a supplemental report of the Venereal Disease Control Committee?
If not, it will stand as in the Handbook.

X—9. TUBERCULOSIS CONTROL COMMITTEE

Tuberculosis Control Committee. A supplementary report?
If not, it will stand as recorded.

X—10. INDUSTRIAL HEALTH COMMITTEE

From the Industrial Health Committee?
If not, it will stand as recorded.

X—11. MENTAL HYGIENE COMMITTEE

From the Mental Hygiene Committee, any supplemental report?
If not, it will stand as in the Handbook.

X—12. CHILD WELFARE COMMITTEE

From the Child Welfare Committee, any supplemental report?
If not, it will stand as in the Handbook.

X—13. IODIZED SALT COMMITTEE

From the Iodized Salt Committee?
If not, it will stand as in the Handbook.

X—14. HEART AND DEGENERATIVE DISEASES COMMITTEE

From the Heart and Degenerative Diseases Committee. Any supplemental report?
If not, it will stand.

X—15. COMMITTEE ON POST-GRADUATE MEDICAL EDUCATION

From the Committee on Postgraduate Medical Education. Any supplemental report?
If not, it will stand.

X—16. COMMITTEE ON PUBLIC RELATIONS

From the Committee on Public Relations. If there is no supplemental report, it will stand.

May I call your attention to the fact that there is a report in the Handbook from the Public Relations Committee and the supplemental report takes the form of the brochure which you received through the mail, copies of which you may get at the back of the room.

XI. Reports of Special Committees

The next item on the agenda is the reports of Special Committees. I am going to ask that you all remain for one very important report, which is down at the bottom of the page, which will take just a few minutes.

XI—1. COMMITTEE ON NURSES' TRAINING SCHOOLS

Is there a report from the Committee on Nurses' Training Schools?
If not, it will stand as on page 73.

XI—2. CONFERENCE COMMITTEE ON PRELICENSURE MEDICAL EDUCATION

Any supplemental report of the Conference Committee on Prelicensure Medical Education?
If not, it will stand as reported.

XI—3. SCIENTIFIC RADIO COMMITTEE

Is there a report from the Scientific Radio Committee?
If not, it will stand.

XI—4. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

Is there a report from the Advisory Committee to the Woman's Auxiliary?
If not, it will stand as reported.
Is there a supplemental report from the Scientific Work Committee?
If not, the report will stand.

XI—5. PROFESSIONAL LIAISON COMMITTEE

Is there a report from the Professional Liaison Committee?
If not, the report will stand.

XI—6. COMMITTEE ON BEAUMONT MEMORIAL

Does the Committee on Beaumont Memorial have a supplemental report?
If not, the report will stand.

XI—7. MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

Does the Committee on the Michigan Foundation have a report?
If not, it will stand as on page 74.

XI—8. JOINT COMMITTEE WITH STATE BAR OF MICHIGAN

Does the Joint Committee with the State Bar of Michigan have a report?
If not, it will stand as in the Handbook.

XI—9. SPECIAL COMMITTEE ON RADIO

Does the Special Committee on Radio have a report?
If not, it will stand.

XI—10. POSTWAR EDUCATION COMMITTEE

Does the Postwar Education Committee have a report?
If not, it will stand as recorded.

XI—11. CONTACT COMMITTEE WITH ASSOCIATION OF WELFARE BOARDS AND BOARDS OF SUPERVISORS

Does the Contact Committee with Association of Welfare Boards and Boards of Supervisors have a report?

XI—12. RHEUMATIC FEVER CONTROL COMMITTEE

I shall call upon Dr. Herman Riecker to give a report on the Rheumatic Fever Control Committee. Dr. Herman Riecker of Washtenaw.

The Committee on Rheumatic Fever Control of the Michigan State Medical Society was established by The Council of the Michigan State Medical Society in 1945 at the suggestion of the Preventive Medicine Committee in order to bring to the attention of the physicians of the state the problems of the control of rheumatic fever and to develop methods for their solution.

During the past year the Committee has formulated the following objectives:

First: To organize a readily available consultation service for the physicians of the state to which any child or adult, regardless of economic status, can be referred for determination of the presence of the disease and advice as to its management.

Second: To assist in finding rheumatic fever cases and placing them under competent medical care, by educational measures directed both to physicians and patients.

Third: To conduct a follow-up program by which all cases of rheumatic fever in Michigan can be adequately cared for, in both a social and medical sense.

Fourth: To develop and preserve statistical data from which progress can be measured.

It was the opinion of The Council that rheumatic fever is more prevalent in the state than has been generally recognized. It was known that the disease causes more crippling of children than all other childhood diseases combined. The results of the Selective Service examinations further substantiated the opinion of The Council that rheumatic fever is a prevalent disease and should be given a more prominent place in preventive medical efforts of the Society.

It was understood by the Committee and The Council that the disease cannot be recognized and controlled by standard public health measures alone; that the family physician must be alerted and trained to suspect the disease and to assume responsibility for its control on a family level as well as the community and state level.

The Preventive Medicine Committee had made rheumatic fever a reportable disease some years before, and had suggested to the Michigan Crippled Children Commission that the rheumatic fever child is a "crippled child." This concept of the rheumatic fever child is not unique in Michigan and was readily accepted by the Commission which is undertaking to finance all those victims of the disease who are in the borderline economic brackets, or indigent.

The first meeting of the present year was held on September 6, 1945, at which time nine consultation and diagnostic centers were organized in the state. The Rheumatic Fever Committee decided that the services of the consultation groups in the various centers would be limited to consultation and diagnosis; that all children must be referred by their family physician, and the reports including suggestions for management made di-

rectly to him; that facilities be available for the control of sulfonamide prophylaxis; that all cases diagnosed as rheumatic fever should be reported to the Michigan Department of Health; that siblings of each proven case be examined; that accurate records on uniform blanks, including follow-up records, should be kept by each center; and that an economic borderline or indigent case must be referred by the family physician through the Probate Court for financial support by the Michigan Crippled Children Commission.

A letter has been sent to all doctors of medicine in the areas of the local centers, notifying them of the creation of the diagnostic and consultation centers.

The following consultation centers have been established and are now in operation: Ann Arbor, Bay City, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Marquette, and Traverse City. At this point a tribute is due Dr. Moses Cooperstock for his initiative, judgment, and enthusiasm in establishing a model clinic in the Upper Peninsula at Marquette.

In order to stimulate interest and arouse a sense of alertness regarding rheumatic fever, the Committee decided to hold a "rheumatic fever conference" in Detroit at which time members of the Society interested in the disease would be invited. This conference was held September 19 and 20, 1945. Three nationally known authorities on the disease were invited to lead the discussions and more than 300 physicians registered for the conference. This conference was supported most heartily by the Detroit hospitals, including arrangements for teaching rounds, and participated in by the staffs of Wayne University College of Medicine and the University of Michigan Medical School. Similar teaching conferences are planned by the Committee for the future.

Through its chairman, Dr. L. Fernald Foster, the Committee was able to obtain from the Michigan Society for Crippled Children and Disabled Adults, by the special efforts of Mr. Percy Angove, a sum of money sufficient to finance the expenses of the nine diagnostic centers. To Mr. Angove and the Society for Crippled Children and Disabled Adults the Committee is sincerely grateful for the $15,000 appropriated to carry on this work.

This gift enabled the Committee to activate all nine centers for diagnosis and consultation. The individual centers have been manned by *physicians* especially interested and well-qualified in this particular field. Their earnest and unselfish efforts are to be heartily commended.

The Committee has been called together five times during the current year to hear reports from individual center chairmen, to discuss problems of each center, and to stimulate further interest in the disease among physicians. At one meeting H. Earle Correvont, Chief of the Rehabilitation Division of the State, explained to the Committee the possible participation of the Division in the program with especial reference to the rehabilitation of children who have recovered from the disease. Needless to say, other cities than those mentioned above have requested the formation of diagnostic groups. These requests are being considered by the Committee.

During the early developmental period of this work it was understood by the Committee that Wayne County already had six consultation centers in operation. Having recently learned that this was a misunderstanding, the secretary of this Committee asked Dr. W. B. Harm, President of the Wayne County Medical Society, to attend a committee meeting. Dr. Harm readily agreed to undertake the formation of consultation groups in Wayne County of the type now in operation in outstate communities. Should Wayne County become organized as part of the State plan, a rheumatic fever control program will have been developed in Michigan that might well serve as a model for other state medical societies to emulate.

In counties where public health nursing facilities are available physicians may utilize such ancillary services to assist in the followup of individual cases. This will be true particularly for indigent children and those who are borderline economically.

During the coming year the Committee expects to continue its educational activities to physicians and laymen. The Committee members and others have been engaged already for numerous talks before lay organizations in order to stimulate a better lay knowledge of the high incidence of the disease and its crippling effects upon the children in Michigan.

In approximately one year of activity, the Committee has noted a marked increase in the recognition of the disease and a definite increase in the number of admissions of rheumatic fever cases to hospitals, including the University Hospital, thus substantiating The Council's decision to undertake this program for the control of the disease. The Council believes that this special interest and effort will be rewarded by a higher quality of medical service to the communities of the state and serve also as a pattern for such organizations in other states.

A preliminary report of six of the nine centers follows, three of the centers not having been able to report: An accurate count of the number of active cases cannot be given but it is estimated that there are between 400 and 500 cases in the state.

1. Number of cases referred to the consultation groups this year: 107.
2. Number of cases diagnosed as rheumatic fever: 55.
3. Number of cases definitely not active rheumatic fever: 52.
4. Number of indigent cases seen: 22.
5. Number of Counties from which cases were referred: 23.
6. Cost of operation of centers to date: $2,604.34.

Much of the year's cost is for permanent fixtures and is nonrecurrent.

It has been thought that rheumatic fever cannot be controlled on a State level.* However, the Committee believes that the only method of adequately controlling this scourge of childhood must be carried out by the combined efforts of individual physicians, supplemented by the Michigan Crippled Children Commission, the Michigan Society for Crippled Children and Disabled Adults, and the Rehabilitation Division of the State, as well as the ancillary services and laboratory facilities of the counties and hospitals of the state.

The Michigan program for the care of the rheumatic fever child is a challenge to the medical profession and the citizens of Michigan, to *solve* adequately a widespread health problem on the *state level,* rather than to pass responsibility to the Federal Government. A strong organization has been built by your Committee in the various communities of the state, the progress in recognition and control of the disease is definitely encouraging, and the Committee recommends that every officer, delegate, and member of the Michigan State Medical Society give this program his wholehearted interest and support.

Respectfully submitted,

L. Fernald Foster, M.D., Chairman
Carleton Dean, M.D.
H. H. Riecker, M.D.
Frank Van Schoick, M.D.
Mr. Percy Angove

(The Speaker, Dr. Ledwidge, resumed the chair.)

The Speaker: This report will be referred to the Reference Committee on Special Committees.

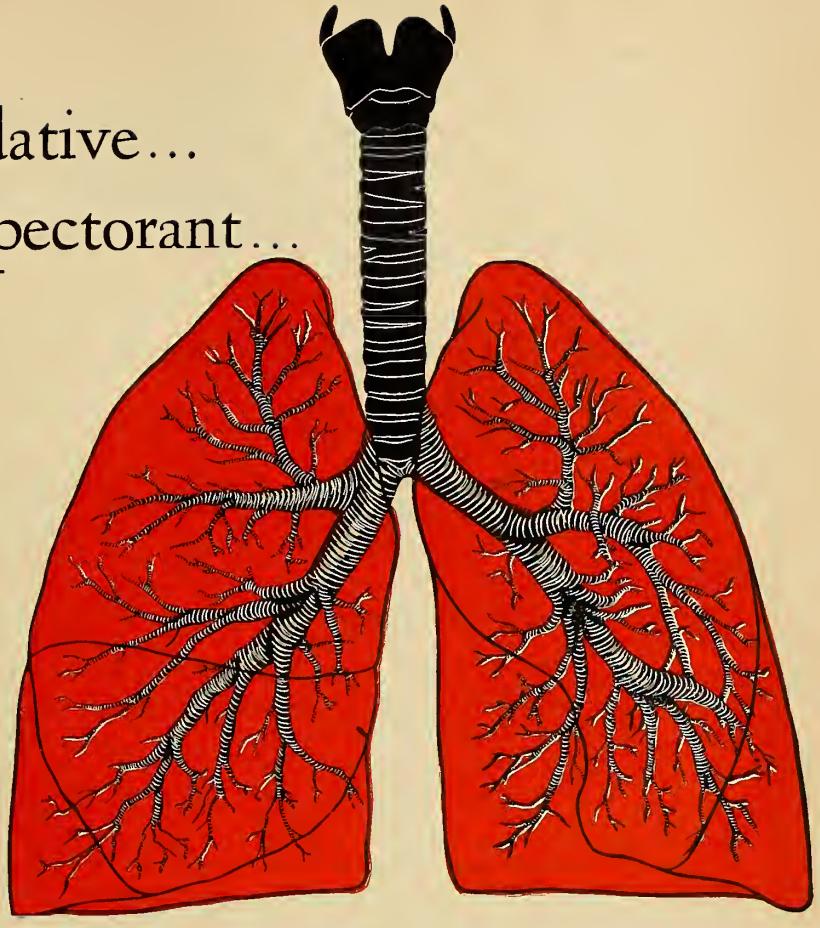
That completes our work for the night.

(The House recessed at eleven-thirty o'clock.)

*T. Duckett Jones, M.D., Assistant Professor of Medicine, Harvard University, before the Murray Committee, U. S. Senate.

(To be concluded in January issue)

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bronchial expectorant...



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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Communications

Marriage of Second Cousins

Oct. 22, 1946

Dear Dr. Haughey:

A young couple have requested this information, if possible from a medical book or from quotation of authority:

May second cousins marry legally? What is the medical opinion at this time, as to mental hazards to the offspring of such marriage? What is the same opinion as to physical hazards?

As I recall, it is legal, at least in some states, and no hazards exist except accentuation of inherent characteristics of both parents.

Any information will be appreciated.

Sincerely yours,
C. D. Klaus

* * *

October 28, 1946

Dear Dr. Haughey:

Re: Letter from Dr. Klaus

Michigan laws recognize as legal the marriage between second cousins. The marriage of first cousins is not legal.

Attempts have been made to predict the mental and physical characteristics of humans according to the Mendelian law.

Clinical evidence does not support the Mendelian law regarding mental diseases. It is noted clinically that the incident of manic depressive psychosis is greater in offsprings who have histories of manic depressive episodes in both parents or their siblings. Regarding epilepsy, it is noted clinically that the child of parents who both have abnormal EEG's is quite liable to be an epileptic of some type. On the other hand, where one parent has a normal EEG and the other is abnormal, the chances of their having an epileptic child are about one in forty, according to Dr. Lennox of Boston, a recognized authority on epilepsy.

Dr. Charles A. Myerson, as chairman of a committee of the American Neurological Association, reported on inherited neurological conditions that, except in certain rare neurological diseases such as amurotic familiar idiocy, the inheritance was unpredictable with any degree of certainty. Dr. A. P. Noyes, in his 2nd Edition "Modern Clinical Psychiatry," states: "Except in rare forms of mental disease, such as Huntington's chorea, there is no conclusive evidence that hereditary transmission follows Mendelian ratios. Our knowledge of hereditary predisposition to mental disease, as in the case of many other problems concerning heredity, is incomplete, and our opinions must remain subject to revision."

The application of the Mendelian law regarding physical conditions such as hemophilia and color blindness and the color of the eyes is not so simple as it sounds. It must be born in mind that the Mendelian law was arrived at through a study of the lower forms of life. The physical and mental characteristics of offsprings of the marriage of second cousins are not predictable with any degree of certainty.

Sincerely,
Henry A. Luce
Chairman, Committee
on Mental Hygiene

Tonsillectomy and Poliomyelitis

October 22, 1946

Dear Doctor Haughey:

I read with interest your editorials on poliomyelitis in the September, 1946, Journal of the Michigan State Medical Society. I was not particularly pleased with the tenor of the editorials because there are data which are arresting and thought provoking in this matter; and in general, good health departments do not issue an edict or give information unless they have a basis for it.

I noted also on page 1148 at the front of the same journal you have included a press release in which Dr. Douglas and I are quoted on tonsillectomy. Oftentimes, reporters do badly when writing on medical subjects; in this case the information was rather well done. But I am taking the liberty of enclosing, nearly *in toto,* a letter in answer to a query from a nose and throat specialist.

I would like your reaction to the data presented and also ask you what you would suggest to lay people when questioned concerning the advisability of tonsillectomy during the poliomyelitis season on the basis of the data presented? Please understand that these studies are still going on; that we do not wish to be dogmatic in the least, but as an answer must be given to the public, it is reasonable to emphasize at the present time at least the undesirability of an elective procedure like tonsillectomy during months when poliomyelitis is prevalent.

Sincerely yours,
Franklin H. Top, M.D.
Medical Director
Herman Kiefer Hospital

* * *

July 20, 1946

Dear Doctor.....:

Dr. Douglas requested me to reply to your letter addressed to him.

I shall include data for the outbreaks of 1939 and 1944, and also the tonsillectomy data on hospital patients for 1945. The 1939 and 1944 data are for city cases only. The 1939 data in the table below are given showing cases, deaths and controls by tonsillectomy status; this is self-explanatory. The case controls were strictly chosen and match the cases. The Special District, West Side, and Children's Institutional controls were in addition to the regular because of odd circumstances sur-

(Continued on Page 1658)



BETTER BABY FEEDING

with

Campbell's STRAINED BABY SOUPS

Q. Will Baby like these soups?

A. If he is like most babies, he will. Mothers who have tried Campbell's Strained Baby Soups say that they are better-tasting—that Baby takes them readily and appears to enjoy their tempting, normal flavors. Each soup retains to the utmost the natural flavors of the meats and vegetables employed. The texture is smooth and the consistency uniform and pleasing to the infant.

Q. Why five kinds?

A. Doctors agree that it's important to get Baby accustomed to a variety of flavors early in life, so that he will accept all foods readily and will not develop "fussy" eating habits. Also, it takes many different foods to supply the approximately 40 nutrients needed for infant development and energy—hence we use vegetables and a cereal in the preparation of each one of our four meat soups.

Q. What about vitamin and mineral retention?

A. The latest scientific information has been drawn upon in developing a cooking method which insures the efficient conservation of vitamins and the retention of minerals. A comprehensive analysis of each soup may be had upon application to Campbell Soup Company, Camden, N. J.

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DETROIT 14 MICHIGAN

Tonsillectomy and Poliomyelitis

(Continued from Page 1656)

rounding each district, but you will note that only in the Children's Institutional controls was the rate of tonsillectomy among them fairly high. This is probably the result of the community, which is very largely made up of middle-class Jewish population, whereas the West Side controls and Special District controls were in Polish areas.

Poliomyelitis in Detroit, 1939
Cases, Deaths and Controls by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All cases	521	306	58.7	215	41.3
Deaths	23	3	(13.0)	20	87.0
Case controls*	497	364	73.2	133	26.7
Spec. Dist. controls	129	113	87.6	16	12.5
West Side controls	167	138	82.6	29	17.4
Child. inst. controls	141	89	63.1	52	36.9

The data for this particular outbreak are the most reliable because controls are included, and one gets a fair idea of the rate of tonsillectomy not only among the ill but also among controls, and tonsillectomy here relates to any time during life and not just for a short period prior to the illness. Data on the occurrence of the procedure within thirty days of illness is as follows: Among 521 cases 5.1%; among 21 deaths, 5.0% among 497 controls, 7.5%. Thus, tonsillectomy within thirty days of illness in the patient was lower than the chosen control. In other words, from these data it would not appear that tonsillectomy *per se* predisposes to poliomyelitis. Of course, the virus must be present in order for the disease to occur at all, but we must admit during this epidemic period that it probably was, at least for argument's sake. Our data, as you will note from successive material presented here, would indicate that in general recent tonsillectomy does not necessarily predispose to poliomyelitis, but there is a very definite indication that it does result when poliomyelitis occurs in a more severe form of the disease, namely, in the bulbar or bulbo-spinal types, and this is not only true of recent tonsillectomy but apparently can be stated for tonsillectomy at any time. Thus, among the non-tonsillectomized in 1939 only 4.2% developed the bulbar type, whereas 27% of patients tonsillectomized at any time during life developed the bulbar form.

Poliomyelitis in Detroit, 1944
Cases and Deaths by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All cases	343	119	34.7	224	65.3
Deaths	16	3	(18.75)	13	81.25

In 1944 there were no controls so that the tonsillectomy history rate for normal children at various ages

(Continued on Page 1660)

*Only first contact mentioned by parent of case included in this category.

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Codfish
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Corn
Crab
Cucumber
Duck
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Eggyolk
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Gelatin
Ginger
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Grapefruit
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Lobster
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Orange
Oyster
Pea
Peanut
Pecan
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Pineapple
Pork
Potato
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Pumpkin
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Tonsillectomy and Poliomyelitis

(Continued from Page 1658)

is not known, but from the above table, the proportion of ill patients tonsillectomized is readily noted. With relation to the severe forms of poliomyelitis, data show that the bulbar type was 13.8% of the total number of cases, but 89.4% had a history of previous tonsillectomy (at any time), and for the spinobulbar group, which was 14.1% of the total cases, 91.7% gave a history of tonsillectomy. With reference to recent tonsillectomy, 13 of the 343 cases developed poliomyelitis within six weeks of the tonsillectomy procedure. Of this group nine had the bulbar or spinobulbar type of the disease.

1945 data, hospital cases only. During the year there were 36 patients, 19 of whom gave a history of tonsillectomy at some time during life. Only one of these had had a tonsillectomy shortly before the onset of illness. In this instance, the tonsillectomy occurred in May, 1945, and the patient first became ill on July 17, 1945. This boy developed the spinal type of the disease.

Poliomyelitis, Herman Kiefer Hospital, 1945
Cases and Deaths by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All Cases	36	17	47.2	19	52.8
Deaths	3	—	—	3	(100.0)

Cases, Deaths, and Fatality Rate by Clinical Type

		No Tonsillectomy			Tonsillectomy		
Type	Total	C	D	Fat. %	C	D	Fat. %
Nonparalytic	16	12	—	—	4	—	—
Spinal	9	5	—	—	4	—	—
Bulbar	6	—	—	—	6	1	(16.7)
Spinobulbar	5	—	—	—	5	2	(40.0)

Again, it will be noted that the bulbar and spinobulbar types occurred principally in persons who had had tonsils removed. In fact, for this *small* experience, all the bulbar and all the spinobulbar cases occurred among the tonsillectomized; all the deaths (three) occurred in this group.

I think it is fair to say, from our data at least, that there is some relationship between previous tonsillectomy and the occurrence of severe forms of poliomyelitis. I can give no adequate explanation for this. I merely state the facts. Whether this would apply to other communities as well I cannot say, because few authors have attacked the problem from this angle. In general, they have studied the occurrence of poliomyelitis in persons recently tonsillectomized. Aycock gives a very complete experience through 1941 in his article entitled "Tonsillectomy and Poliomyelitis; Epidemiologic Considerations,"—Aycock, W. L., Medicine 21:65 (Feb., 1942). This is actually a monograph on the subject.

I note that you desire this information for a questionnaire, and as you probably know, questionnaires are notoriously poor methods of obtaining information on which exact judgment can be passed. A good example of this is Page's article, "Tonsillectomy and Poliomyelitis;

(Continued on Page 1662)

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Tonsillectomy and Poliomyelitis

(Continued from Page 1660)

One Case of Poliomyelitis Following 8,915 Tonsillectomies,"—Arch. Otolaryng., 39:232 (Apr., 1944). Page sent out 27,849 questionnaires to parents of children who had been tonsillectomized at the Manhattan Eye, Ear, Nose and Throat Hospital during the years 1937, 1939, and 1941; 8,915 of these questionnaires were returned—approximately one-third of those sent. He states that among the replies obtained only *seven* infections occurred following tonsillectomy. These seven relate to any type of infection, for the question asked was this: *Have you had any illness since tonsillectomy?* If you are interested, in the article are given the number of questionnaires sent and received by year; but I call your attention to the astounding fact of only *seven* illnesses among essentially 9,000 replies! He must have questioned people living in Utopia, for certainly children at tonsillectomy age would be getting, over a period of four years, measles, chickenpox, whooping cough, and other childhood diseases, without even counting such things as influenza, sore throat, scarlet fever, et cetera. In other words, the questionnaire method, at least in this instance, was worthless. Additional papers which you may like to read are those of the following investigators:

Helms, K.: M. J. Australia, 1:467, (April, 1941).

Toomey & Krill: Ohio State M. J., 39:653, (July, 1942).

Fisher, Stillerman & Marks: Am. J. Dis. Child., 61: 305, (Feb. 1941).

Lucchesi & LaBoccetta: Am. J. Dis. Child., 68:1, (July, 1944).

The above studies are not carried out on a control basis, but all through these runs this obvious fact, that a preponderance of the bulbospinal cases have either recently been tonsillectomized or have been tonsillectomized some time in their lives, and that the rate obtained in these severe clinical types is far and away higher by two or three times the rate obtained among normal, well children in a given community. With this body of facts I think it is resonable to advise that tonsillectomy not be done during the poliomyelitis season, but because there is evidence that it predisposes to the occurrence of poliomyelitis (at least in our experience), but that when it occurs among persons recently tonsillectomized the severe clinical types are likely to result; and further in our experience (not studied extensively by others) it would appear that tonsillectomy at any time has a bearing on the clinical type, the reason for which I cannot give. However, the numbers involved would lead me to believe that it is a steady occurrence since 1939; at least it is more than a mere happenstance or caused by chance.

I shall be happy to discuss these findings with you further at any time.

Sincerely yours,

Franklin H. Top, M.D., Director,
Epidemiology and Communicable Diseases,
Detroit Department of Health.

(Continued on Page 1664)

Say you saw it in the Journal of the Michigan State Medical Society

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Tonsillectomy and Poliomyelitis

(Continued from Page 1662)

October 23, 1946

Dear Sirs: Your question as to tonsillectomies causing polio—Have had none of that kind, but in 1945 circumcision on a five-year-old boy. He had a permanent polio paralysis in one leg within one week. Do not know if operation had any influence on this youngster. For your information and statistical record.

L. E. Hart, M.D. (Pediatrician)

Furnishing and Filling Out Prescriptions For Eligible Veterans

General.—This information is published as a guide to all concerned and to be used as a standard procedure in furnishing drugs to eligible veterans through the pharmacies in the State of Michigan as contracted by the Veterans Administration with the Michigan State Pharmaceutical Association at no cost to the veteran. The procedure herein outlined will be followed at all times unless orders to the contrary are received.

Procedure.—1. When a veteran is treated by a physician who has been authorized by the Veterans Administration to tender such treatment and wishes to prescribe medication to the veteran, he will do so by writing out the prescription on one of his regular printed blanks. The prescription, which the authorized physician issues to the veteran, will contain the following information:

(a) Name of Veteran
(b) Address of Veteran
(c) Date of Prescription
(d) Statement of physician as follows: "I am authorized to treat and prescribe for the above-named Veterans Administration patient." The physician's statement of authorization may be written, typed or stamped on either side of the prescription blank.
(e) Signature of the Physician.

2. The veteran can then take this prescription to any participating pharmacy of the State of Michigan Pharmaceutical Association and have it filled at no cost to himself, *providing that he has the prescription filled within ten days after issuance.* The veteran will upon receipt of his medication from the pharmacist sign the following statement on the prescription. "I acknowledge receipt of Prescription No. —— on Date ————.

3. The above procedure is effective only for prescriptions filled out after issuance of July 23, 1946.

(Signed) Guy F. Palmer

Miscellaneous

Dear Doctor Haughey:

In the September issue of The Journal of the Michigan State Medical Society, I noted on page 1244 in the section devoted to activities of the Michigan Depart-

(Continued on Page 1682)

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NEWS OF PERSONNEL

M. T. Johnson, M.D., M.P.H., was appointed director of the Delta County Health Department effective October 1, 1946. Dr. Johnson was formerly director of District Health Service No. 5 of the Iowa State Department of Health at Fort Dodge, Iowa.

* * *

Henry C. Huntley, M.D., formerly director of the Ottawa County Health Department at Miami, Oklahoma, has been appointed director of the Lenawee County Health Department. Headquarters of the new Department are at 119 W. Church Street, Adrian.

* * *

Upon request of the Irish Free State, G. D. Cummings, M.D., director of the Michigan Department of Health's Bureau of Laboratories, left November 12 for Dublin to study epidemic diarrhea of the newborn.

Dr. Cummings has been directing such studies in Michigan for five years. For his Ireland study, specimens were flown to the Michigan Department of Health Laboratories for testing.

Dr. Cummings' trip was financed by the W. K. Kellogg Foundation.

Editor's Note: The *British Medical Journal* for several issues has been commenting on the unsolved epidemic of infantile diarrhea.

INCIDENCE OF POLIOMYELITIS

In the previous epidemic years poliomyelitis has dropped sharply after September. The 1946 variation from this trend may be seen in the following figures of reported cases in Michigan by month.

	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.
1946	5	1	2	2	1	4	73	322	282	227
1944	0	0	0	1	0	5	79	327	318	97

MARRIAGES TOP RECORD

Marriages in Michigan will break all records in 1946 with an estimated 80,000 recorded against the 51,582 in 1942, the highest total for any previous year.

NUMBER OF MARRIAGES BY MONTH REPORTED

	1944	1945	1946
September	3,817	4,776	9,136
January through September	30,600	32,221	58,888
Total for year	41,678	48,329	.....

INCIDENCE OF COMMUNICABLE DISEASE

Disease	October, 1946	October, 1945	7-year median
Diphtheria	12	66	41
Gonorrhea	1,080	1,030	806
Lobar Pneumonia	49	49	121
Measles	102	401	175
Menningo Meningitis	9	12	8
Pertussis	886	553	680
Poliomyelitis	227	46	66
Scarlet fever	455	442	442
Syphilis	1,827	1,282	1,057
Tuberculosis	589	438	526
Typhoid fever	5	6	12
Undulant fever	7	23	10
Smallpox	1	0	1

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Woman's Auxiliary

NEW OFFICERS BEGIN YEAR'S DUTIES

Officers of the Woman's Auxiliary of the Michigan State Medical Society elected at the annual meeting in September have now assumed their respective duties, and committee chairmen have been appointed to carry on the work of the coming year. The roster of officers and committee chairmen is as follows:

Woman's Auxiliary Officers

President—Mrs. Retla Alter, 801 S. West Avenue, Jackson

President-elect—Mrs. T. Grover Amos, 2007 W. Boston Blvd., Detroit

Vice President—Mrs. Leonard Himler, 1615 Wells Street, Ann Arbor

Honorary President—Mrs. Guy L. Kiefer, 834 Rosewood Ave.. E. Lansing

Past President—Mrs. Lloyd C. Harvie, 417 Ardussi Ave., Saginaw

Treasurer—Mrs. Homer Stryker, 448 Inkster St., Kalamazoo

Secretary—Mrs. John W. Wholihan, 602 W. Michigan, Jackson

Committee Chairmen

Advisory—Philip Riley, M.D., 500 S. Jackson St., Jackson

Archives—Mrs. Horace French, 1620 W. Main Street, Lansing

Bulletin—Mrs. E. Gifford Upjohn, 2230 Glenwood Ave., Kalamazoo

Finance—Mrs. Roger Walker, 1507 Iroquois Ave., Detroit 14

Historian—Mrs. John J. Walch, 709 Fifth Ave., Escanaba

Hygeia—Mrs. S. A. Fiegel, 500 Michigan Ave., Sturgis

Legislation—Mrs. R. Bruce Macduff, 2515 Parkside Dr., Flint 3

Organization—Mrs. Leonard Himler, 1615 Wells Street, Ann Arbor

Parliamentarian—Mrs. G. Rex Bullen, 418 Third Street, Jackson

Press—Mrs. Charles MacCallum, Box 222, Midland

Program—Mrs. H. P. Kooistra, 1564 Pontiac Rd., Grand Rapids

Public Relations—Mrs. Frederick Pietz, 2139 Gratiot St., Saginaw

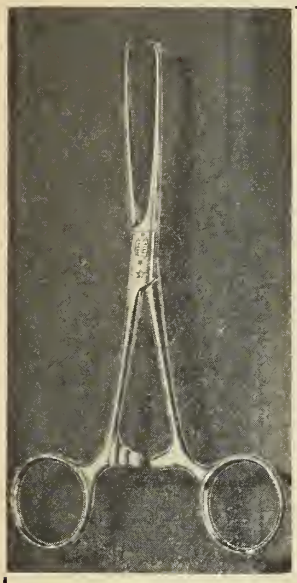
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Student Loan Fund—Mrs. R. E. Scrafford, 2210 McKinley St., Bay City

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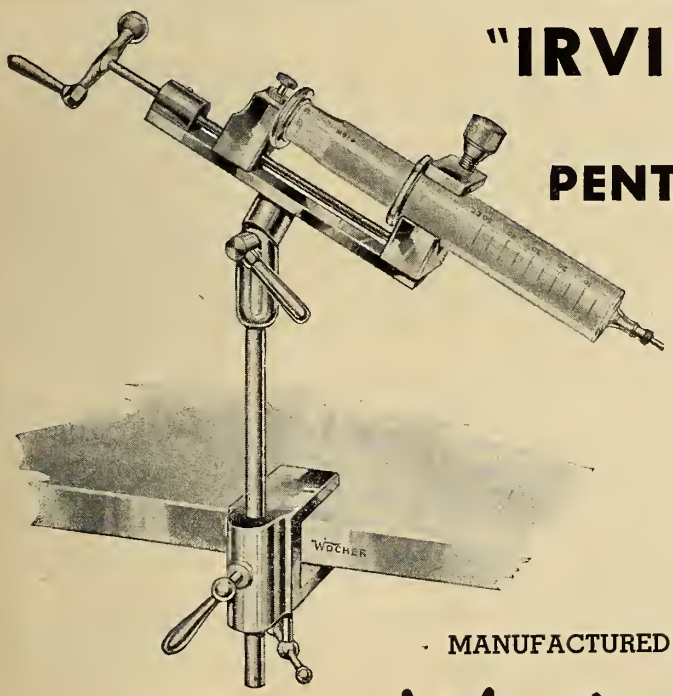
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In Memoriam

Edward J. Agnelly, M.D., Detroit, was born in New Orleans, September 30, 1877. He graduated from Tulane and Columbia universities, after which he received his medical degree from the Detroit College of Medicine in 1907. He was a veteran of World War I having entered as a lieutenant in the Army Medical Corps and rising to a lieutenant colonelcy in command of the reconstruction hospital at Camp Dix at the close of the war. He was the founder of the American Legion's billet at Otter Lake for the orphaned children of American war veterans. Doctor Agnelly died in Detroit on September 5, 1946.

* * *

James Deacon Bruce, M.D., Ann Arbor, was a native of Blackstock, Ontario, in 1872. He came to the United States in 1892 to enroll in the Detroit College of Medicine and Surgery from which institution he was graduated in 1896. For a number of years, he engaged in private practice in Saginaw. As a Captain in the Canadian Army Medical Corps in 1916, Doctor Bruce had charge of medical service at the Duchess of Connaught base hospital on the Taplow estate of Lord Astor, near London. Upon the entry of the United States into the war, Doctor Bruce resigned his commission to accept a captaincy and the direction of the surgical service in the American Red Cross evacuation hospital near Paris, later becoming its commanding officer. In 1925 Doctor Bruce returned to the University of Michigan Medical School as director of the department of internal medicine and chief of medical service of the University Hospital. He was made director of the department of postgraduate medicine in 1928, vice-president in charge of university relations in 1931, and chairman of a new division of health sciences in 1938. He held numerous posts on state and national bodies concerned with medical education. He was made a Fellow of the American College of Physicians in 1925, served as American College of Physicians governor for Michigan from 1930-36, regent in 1936, and president, 1940-41. He became a Fellow of the American College of Surgeons in 1919. On his retirement, the University of Michigan awarded him the honorary degree of doctor of science in medical education for his nationally accepted concepts of health services and for his work as physician, teacher and administrator in promoting the public welfare of the state. Doctor Bruce died in Ann Arbor on September 5, 1946.



The House of Delegates, at its 81st Annual Session in Detroit, September 24, 1946, unanimously passed the following memorial resolution in honor of Doctor Bruce:

WHEREAS, The House of Delegates of the Michigan State Medical Society regrets the recent death of the late Dr. James D. Bruce, and

WHEREAS, Dr. Bruce was an outstanding practitioner of medicine and surgery in his home town of Saginaw for many years, and

WHEREAS, he ably served as a member of The Council of the Michigan State Medical Society for three successive terms, and

WHEREAS, in his later years, his untiring devotion to the cause of medical education, resulted in the placing on a firm footing the postgraduate medical education program of the Michigan State Medical Society and

WHEREAS, his influence was instrumental in establishing the Children's Clinics at Marquette and Traverse City,

THEREFORE, BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society register its grief and extend its deep sympathy to Mrs. Bruce and family at the loss of such an outstanding member, and express its appreciation of his services to the principles of organized medicine, and

BE IT FURTHER RESOLVED, that a copy of this resolution be spread on the minutes of the House of Delegates and a copy transmitted to Mrs. Bruce.

* * *

Ray E. Dean, M.D., Three Rivers, was born February 16, 1879, in Girard, Michigan. He was graduated from the University of Michigan Medical School in 1908, and had practiced medicine in Three Rivers since that time. Doctor Dean was a former secretary of the St. Joseph County Medical Society. He died at his home on November 4.

* * *

William P. Derck, M.D., Marysville health officer, physician and surgeon more than fifty years, died September 2, in Port Huron, at the age of seventy-nine.

Dr. Derck, who had been ill for many months, celebrated his fiftieth anniversary as a practicing physician and surgeon in 1944. He was the first president of the St. Clair County Medical Society and the first staff president of Port Huron Hospital. He was made a Member Emeritus of the Michigan State Medical Society in 1945.

Dr. Derck was born in Valley City, Ohio, October 12, 1866. He was graduated from the Detroit College of Medicine and took his undergraduate work at Toronto University. He came to Port Huron fifty-two years ago, after serving his internship in St. Mary's Hospital, Detroit. He was the last president of the Port Huron Academy, serving in that capacity when it became the St. Clair County Medical Society.

He was a member and former vestryman of Grace Church and a member of Marysville lodge No. 498, F. & A. M., and Port Huron Commandery No. 7, Knights Templar.

He is survived by his widow, Mrs. Margaret M. Derck, whom he married April 11, 1917, and a daughter, Mrs. Bruce N. Tappan, Grosse Pointe; a stepson, Milton C.

(Continued on Page 1672)



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*Cohen, A., Trommer, P., and Goldman, J., J.A.M.A., 130:265, 1946.

(Continued from Page 1670)

Wood; two sisters, Mrs. Harry C. Philip and Miss Elizabeth Derck, all of Detroit; and a granddaughter, Miss Mary Ellen Tappan, Grosse Pointe.

* * *

Shakir E. Far, M.D., Quincy, was born in Palestine, August 13, 1888. He came to the United States with his parents in 1904. Doctor Far was graduated from the University of Illinois medical school, following which he entered the practice of medicine in Battle Creek, later moving to Quincy where he remained in practice for twenty-five years. Doctor Far died in Quincy on July 18, 1946.

* * *

Arthur L. Gignac, M.D., Detroit, was born on May 19, 1887, in Tilbury, Ontario. He entered Detroit College of Medicine in 1910, after receiving his early education in Windsor, and was graduated in 1914. He served for many years on the staff of St. Mary's Hospital. Doctor Gignac died on October 8, 1946, in Detroit.

* * *

Jesse James Holes, M.D., Battle Creek, was born in Barry County Michigan, August, 1871. He was graduated from the Detroit College of Medicine, served as a captain in the Army Medical Corps in World War I, including a period overseas. Dr. Holes was made a Retired Member of the Michigan State Medical Society in September, 1944. He died in Florida on January 19, 1946.

James A. Humphrey, M.D., Monroe, was born September 12, 1882, at Wayland, Michigan. He was graduated from Hahnemann Medical College of Chicago in 1908. From 1911 until his entry into the Army Medical Corps in 1917, he practiced in Lansing. He served with the 85th Infantry Division in World War I, going overseas July 30, 1918, and seeing front line action from September 12 until the signing of the Armistice. Following discharge from the Army in 1919, Doctor Humphrey returned to Lansing for a period and later moved to Monroe where he practiced till his death on October 14, 1946.

* * *

Ladislaus R. Kaminski, M.D., Detroit, staff physician at Providence Hospital for fifteen years, died August 15, 1946. He practiced in Detroit for thirty years. He was a veteran of World War I, having served as a captain in the Army Medical Corps with the Grace Hospital Unit.

* * *

A. S. Kitchen, M.D., Escanaba, was born August 30, 1875. He studied medicine at the University of Toronto, graduating in 1899. He began his medical practice at Rapid River and moved to Escanaba in 1903 where he remained until his death on October 30, 1946.

* * *

Walter W. Lang, M.D., Kalamazoo, was born in South Bend, Indiana, coming to Michigan when he was a young

(Continued on Page 1674)

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(Continued from Page 1672)

boy. He attended the University of Michigan Medical School in 1901-02; in 1903 he entered Hahnemann Medical College in Chicago from which school he graduated in 1905. Doctor Lang's entire medical career was spent in Kalamazoo where he died on November 4.

* * *

Vernon James McGrath, M.D., Reed City, was born in Rochester, New York, on September 21, 1906. He attended University of Detroit and graduated from Wayne University College of Medicine in 1935. He had practiced in Reed City since 1936. He was a member of the Phi Rho Sigma medical fraternity, a Fellow of the American Medical Association, past president of the Mecosta-Osceola Medical Society, member of the staff of Reed City Hospital. Doctor McGrath died in Reed City on August 24, 1946. He had the distinction of being one of the first patients who had insulin therapy for diabetes and used it continuously for the past twenty-two years.

* * *

Paul Roth, M.D., Battle Creek, was born in Switzerland, coming to the United States at the age of sixteen. He is a graduate of the American Medical Missionary College. He was a pioneer in the use of oxygen for medical treatment and metabolism testing. Doctor Roth was a Retired Member of the Michigan State Medical Society since 1944. He died in Battle Creek on November 7.

* * *

Cortland W. Schepeler, M.D., Brooklyn, was born in Correy, Pennsylvania. He was graduated from the Homeopathic Medical School in 1915, and served his internship at the Homeopathic Hospital in Ann Arbor, after which he established his practice in Brooklyn. Doctor Schepeler served in the Army Medical Corps during World War I from July 10, 1917 to June, 1919. Doctor Schepeler died in Jackson on October 27, 1946.

* * *

Gustaf Sjolander, M.D., Midland, was born July 8, 1872, in Nalden, Sweden. He came to the United States at the age of sixteen with his parents and settled at Ishpeming. He was graduated from the Saginaw Valley Medical College, Saginaw, in 1903, and had practiced in Midland since that time. Doctor Sjolander died in Midland, September 6, 1946.

* * *

John W. Speck, M.D., Jackson, died at his home on September 8, 1946. Doctor Speck was on the staff of Foote and Mercy Hospitals. He had been a resident of Jackson since 1927 when he became superintendent of medicine at the Southern Michigan prison. He had been in private practice since 1935.

* * *

Kenneth Stuart, M.D., Bay City, was born in Simcoe, Ontario, February 3, 1901. He graduated from the University of Toronto, receiving his medical degree in 1926. He interned at Buffalo General Hospital, Buffalo, N. Y., St. Francis Hospital, New York City, and Schenectady General Hospital, Schenectady, New York.

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Doctor Stuart had practiced in Bay City since 1929. He died while visiting in Ontario on August 27, 1946.

* * *

Norman G. Tufford, M.D., Detroit, died early in August in Eskilstuna, Sweden, while visiting with his wife and daughter at Mrs. Tufford's family home. Doctor Tufford was a graduate of the University of Toronto where he received his medical degree in 1923. Doctor Tufford was buried in Sweden.

* * *

Dale E. Thomas, M.D., Saginaw, was born October 25, 1904, in Flint, but spent virtually his entire life in Saginaw. He was graduated from the University of Michigan Medical School in 1928 and interned at Saginaw General Hospital, after which he entered private practice in Saginaw. Doctor Thomas was a former secretary of the Saginaw County Medical Society. He died suddenly on November 5 in Saginaw.

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What's What

The American Medical Association's Centennial will be celebrated in Atlantic City, June 9-13, 1947.

* * *

Federal narcotic licenses must be renewed annually on or before July 1. Send remittance to the Narcotic Bureau, Federal Bldg., Detroit.

* * *

G. Don Cummings, M.D., head of the State Health Department Laboratory, visited Ireland in November to help curb a diarrhea epidemic among newborn babies.

* * *

Harvey C. Hansen, M.D., announces the opening of offices at 417 Post Building, Battle Creek, Michigan, with practice limited to Orthopedic Surgery. Dr. Hansen is just returning to private practice after Army service.

* * *

Henry E. Perry, M.D., of Newberry, President of the Michigan State Medical Society in 1936-37, was a visitor in the Executive Offices on October 28. Dr. Perry, now eighty-one years of age, resides in Lakeland, Florida, six months of every year.

* * *

Naval Medical Officers are needed in the Naval Air Reserve Training program. If interested in full-time active duty, contact the Bureau of Naval Personnel, Chief of Naval Air Reserve Training, Naval Air Station, Glenview, Illinois.

* * *

R. S. Breakey, M.D., Lansing, was named President-elect of the North Central Section, American Urological Association, at the 20th annual meeting held in Rochester, Minnesota, early in November. Dr. Breakey is also President-elect of the Ingham County Medical Society, Michigan.

* * *

1947 Michigan State Medical Service Dues and Assessments. The MSMS dues for 1947 will remain at $12.00. The assessment for public relations and information, levied by the 1946 House of Delegates, will be $25.00. This makes a total of $37.00 per capita payable to the Michigan State Medical Society in 1947. These payments are deductible in reporting income taxes.

* * *

The Michigan State Medical Society's 82nd Annual Session will be held at the Pantlind Hotel-Civic Auditorium, Grand Rapids, from Tuesday noon to Friday noon, September 23-26, 1947. Twenty-eight (28) eminent guest-speakers from all parts of the United States and Canada will be presented on the General Assembly program.



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Colloidal Iron	1½ Grs.
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A. S. Brunk, M.D., Detroit, President of the Michigan Health Council, spoke on "The Aims and Purposes of the Michigan Health Council" at the 26th Annual Michigan Public Health Conference, Pantlind Hotel, Grand Rapids, on October 30. He also addressed the American Association of Physicians and Surgeons in Chicago, November 8, on "Accomplishments of the Conference of Presidents of State Medical Societies."

* * *

The AMA Committee on National Emergency Medical Service has mailed 45,000 questionnaries to discharged medical officers of World War II. This postwar questionnaire requests information on the general and military status of the medical veteran, training, assignments, and professional skills. For copies of the questionnaire write the NEMS Committee, American Medical Association, 535 N. Dearborn, Chicago 10, Illinois.

* * *

Thoracic Diseases will be the subject of a postgraduate course sponsored by the American Trudeau Society in co-operation with the University of Wisconsin Medical School, to be held at Madison, March 3-8, 1947. Fee: $50. The course is intended primarily for physicians of Michigan, Wisconsin, Ohio, Indiana, Illinois, Missouri, Iowa, and Minnesota. For application blanks write Cameron St. C. Guild, M.D., Executive Secretary, American Trudeau Society, 1790 Broadway, New York 19.

* * *

Wilfrid Haughey, M.D., Editor of THE JOURNAL of the Michigan State Medical Society, addressed the Junior Chamber of Commerce of Midland on "Political Medicine." He discussed the Wagner-Murray-Dingell Bills, and the efforts of the Medical Profession to meet the increasing demands of the people for more security in their health service. The Taft-Smith-Ball Bill No. S. 2143 was outlined, and its *nonregimentation* principles were stressed as making it much more suitable for our needs.

* * *

Honors to our advertisers.—Nathan Hack, President and founder of the Hack Shoe Company, was elected Honorary President of the Michigan Retail Shoe Dealers Association at the annual convention held in Detroit, November 3, 4, 5 and 6. Clyde K. Taylor of Rackham's Inc., was elected President of the Association, while Morton Hack, elder son of Nathan Hack, was elected as Vice President and Editor of "Footsteps," the Association's monthly publication. Mr. Hack's second son, Leonard, is President of the Detroit Shoe Retailers Association.

* * *

The achievements of the medical profession in the field of fine arts has been well publicized by the American Physicians' Art Association, of which Harvey Agnew, M.D., of 280 Bloor St., W., Toronto 5, Canada, is President, and by its sponsor, Mead Johnson & Co. of Evansville, Indiana.

At the AMA Centennial in Atlantic City next June, $34,000 in Savings Bonds for the special contest "Courage and Devotion Beyond the Call of Duty" (in war and in peace) will be awarded.

* * *

Relief grants are up and so are the rolls. The average Old Age assistance grant last month was $35.75 as com-



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pared with $32.28 a year ago. Mothers' pensions increased from $67.30 a year ago to $78.08 this year and direct relief from $32.66 to $35.72. During the past year, relief rolls have jumped from 11,459 to 18,563. Social Welfare director F. F. Fauri will ask the next legislature for a revision of the Old Age Assistance law to permit grants higher than the present $40 per month, half of which is paid by the federal government.

—*Michigan Survey,* November 12, 1946.

* * *

Socialized Medicine gets a body blow from current scientific survey of state medicine in Russia, Germany, England and New Zealand, published by U. S. doctors and dentists opposed to Wagner-Murray-Dingell Bill.

To place all doctors, dentists and hospitals under federal bureaucratic control, the study concludes, would be to drop American standards of health and welfare into "the appalling quagmire of mediocrity in which we now find it in Germany, England and Russia after years of political medicine."

—*Nation's Business,* November, 1946

* * *

Public speaking class, Wayne County Medical Society: "The recommendations from the Speakers Bureau that a class in public speaking be set up by the Wayne County Medical Society for the membership was approved by The Council. The purpose of these classes will be to train new recruits for the Speakers Bureau so that the Society will have speakers available for both lay and medical groups and on any subject requested. The practical questions involved in setting up these classes will be handled by the Board of Trustees of the Speakers Bureau."—*Detroit Medical News,* October 28, 1946.

* * *

"Doctor of Medicine" the radio program over Station CKLW, each Friday at 12:45 p.m., has presented the following members of the Michigan State Medical Society as guest speakers (to November 1):

R. S. Morrish, M.D., Flint; L. Fernald Foster, M.D., Bay City; Ralph A. Johnson, M.D., Detroit; A. S. Brunk, M.D., Detroit; A. E. Catherwood, M.D., Detroit; A. E. Schiller, M.D., Detroit; Wyman C. C. Cole, M.D., Detroit; Joseph C. Molner, M.D., Detroit.

These programs are presented by the Radio Committee of the Michigan State Medical Society and are sponsored as a public service by the Hack Shoe Company, Detroit.

* * *

Children's Diabetic Camp.—Did you know that such a camp exists in Michigan?

It is named the Grace Hospital Children's Diabetic Camp and is under the direction of Grace Hospital, Woman's Auxiliary, Detroit. Last summer it was held at the Franklin Village Settlement Camp at Lake Orion, for a two weeks' period. The Hospital sent a resident and two interns, several nurses, a dietitian, as well as counsellors.

The Children's Diabetic Camp is for girls and boys, with separate quarters.

So far as is known, the nearest other children's diabetic camp is Dr. John's, located in Cleveland, Ohio.

Say you saw it in the Journal of the Michigan State Medical Society

Medical Veterans' Appreciation for Remission of MSMS Dues.—The following resolution was presented to and adopted by the House of Delegates of the Michigan State Medical Society at its 1946 Annual Session in Detroit:

"WHEREAS, Returning medical veterans have been faced with innumerable problems and considerable expense in re-establishing their practices; and

"WHEREAS, The majority of medical veterans have had their income considerably curtailed for the past several years; and

"WHEREAS, The medical veterans are anxious to maintain their affiliation with the State Medical Society, therefore be it

"RESOLVED, That the Medical Veterans of World War II express their very sincere appreciation to the Michigan State Medical Society for its remission of dues granted to the medical veterans."

* * *

More Preventive Medicine Needed.—

"WHEREAS, A major inadequacy in the civilian health protection in war as in peacetime continues from the failure of many states and of not less than half the counties in the states to provide even minimum necessary sanitary and other preventive services for health, by full-time professionally trained medical and auxiliary personnel on a merit system basis supported by adequate tax funds from local and state and where necessary from federal sources; therefore be it

"RESOLVED, That the Trustees of the American Medical Association be urged to use all appropriate resources and influences of the Association to the end that, at the ealiest possible date, complete coverage of the nation's area and population by local, county, district or regional full-time modern health services be achieved."

—Proceedings of the House of Delegates of the American Medical Association, the ninety-third annual session, Atlantic City, N. J., 1942.

* * *

The Council of the British Medical Association (in opposing the National Health Service Bill which was introduced in Parliament on March 21, 1946) has restated four principles which are considered essential to good medical service and have a direct bearing on any proposal to change the system under which medical services are rendered. The principles are: (1) The medical profession is, in the public interest, opposed to any form of service which leads directly or indirectly to the profession as a whole becoming full-time salaried servants of the state or local authorities. (2) Doctors should, like other workers, be free to choose the form, place, and type of work they prefer without governmental or other regulation. (3) Every registered medical practitioner should be entitled as a right to participate in the public service. (4) There should be adequate representation of the medical profession on all administrative bodies associated with the new service in order that doctors may make their contribution to the efficiency of the service. (British Medical Journal, March 30, 1946, page 474)

—Extract from the Monthly News Letter of the American College of Radiology

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Annual Clinic Day Program

January 29, 1947

9:00 A.M.—Speech of Welcome

The program will follow immediately, and will include the following speakers:

Gordon B. Meyers, M.D., Professor of Medicine, Wayne University
Subject: Recent Advances in Therapy

Jerome W. Conn, M.D., Associate Professor of Medicine, University of Michigan
Subject: Some Newer Concepts of Diabetes.

Willard Owen Thompson, M.D., Professor of Medicine, University of Illinois
Subject: Glandular Problems in Childhood

Richard W. TeLinde, M.D., Professor of Gynecology, Johns Hopkins University
Subject: Tumors of the Female Genital Tract

J. Dewey Dodrill, M.D., Director Chest Surgery, Mt. Carmel Mercy Hospital
Subject: Surgery of the Heart and Great Vessels

Leland Sterling McKittrick, M.D., Professor of Surgery, Harvard University
Subject: Peptic Ulcer, Surgical Management.

James C. Sargent, M.D., Professor of Urology, Marquette University
Subject: Calculus Disease of the Genito-Urinary Tract

Speaker at noon luncheon:
Mr. Graham L. Davis, Director of W. K. Kellogg Foundation, Michigan's Hospital Plan

Speaker at evening banquet:
Nathan Gist, New York
The Final Test of Democracy

(Members of the Michigan State Medical Society are welcome.)

CONJUNCTIVITIS

(Continued from Page 1618)

2. The coagulose test was found to be positive in all cases of hemolytic staphylococcus aureus. Non-hemolytic, staphylococcus aureus, hemolytic and non-hemolytic staphylococcus albus cases were reported negative.

3. Two medical officers conduct the EENT Department at this hospital that has an average monthly rate of 3,000 or more new and old patient treatments.

4. A simple technique is suggested as a time-saver in a busy clinic.

References

1. Allen, J. H., and Wood, M. A.: Conjunctivitis in Iowa. J. Iowa M. Soc., 28:561, (Nov.) 1938.
2. Duke-Elder: Textbook of Ophthalmology. Vol. 2, p. 1534. St. Louis: C. V. Mosby Co., 1938.

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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

PENICILLIN, ITS PRACTICAL APPLICATION. Under the general editorship of Professor Sir Alexander Fleming, M.B., B.S., F.R.C.P., F.R.C.S., F.R.S. Professor of Bacteriology in the University of London, St. Mary's Hospital, London. Philadelphia: The Blakiston Company, 1946. Price $7.00.

Twenty-eight specialists tell the story of penicillin from its preparation to the use in every sort of condition where it is useful. The methods of administration, dosage, best methods of application, and selection of cases is given. Tables are published showing the results of use as compared to other agents. There are many illustrations and illustrative case reports. It is a handy and worth while reference.

ELECTROCARDIOGRAPHY IN PRACTICE. By Ashton Graybiel, M.D., Captain Medical Corps, U. S. Naval Reserve, Coordinator of Research, U. S. Naval School of Aviation Medicine, Pensacola, Florida, and Paul D. White, M.D., Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital. Second Edition, with 323 illustrations. Philadelphia: W. B. Saunders Company, 1946. Price, $7.00.

This is the second edition of a previously well-received volume, and the original purpose—"to aid in the interpretation of electrocardiograms which are commonly seen in medical practice"—remains unchanged. Much new material is presented; a section on precordial leads has been added and ample new illustrations of normal and abnormal tracings with fuller and more complete case records included. The interpretation of the electrocardiogram is presented first, clinical findings following and finally, a comment is added to complete the analysis of the case.

The volume is composed of five parts. The first part is devoted to essential physiologic principles and technique, including the above-mentioned section on precordial leads. The second part emphasizes the broad range of the normal patterns and the third part deals with the various disorders of rhythm. In the fourth part the changes and patterns in the various diseases which affect the heart is especially well treated. A discussion of artifacts is also included. The fifth part presents an entirely new series of "test" electrocardiagrams for practice in interpretation. Two appendices dealing with unipolar and esophogeal leads and the effect of exercise and low oxygen inhalation tests complete this volume.

Because of its distinguishing general format and style, ample new illustrations and tables and thorough discussion of the most recent advances in clinical electrocardiography, this edition is highly recommended for the library of any physician interested in heart disease.

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Little Joe Genius says—

I see where Doctor Butler (a highbrow from Boston) says that general practice is obsolete, yet goes all out for a national compulsory health bill for medical care whose foundation is based on the average care given by these obsolete gentlemen. Ain't people funny?

COMMUNICATIONS

(Continued from Page 1664)

ment of Health that there was a news item concerning my wife and myself.

As I recall, the item stated simply that my wife, Dr. Gladys J. Kleinschmidt, had joined me in Chicago, and that I was affiliated with the Tuberculosis Institute of Chicago and Cook County. It just so happens that that is one of my affiliations. I am also affiliated with the University of Illinois, School of Medicine, as Associate Professor of Public Health and Preventive Medicine. In addition, I am a member of the Board of Directors of the Municipal Tuberculosis Sanatorium.

I thought this information would be of interest to you and would appreciate were a correction entered in the next issue of THE JOURNAL.

Sincerely yours,

EARL E. KLEINSCHMIDT, M.D., Dr. P.H.,
Director, Tuberculosis Institute, Chicago, Illinois.

* * *

Dear Dr. Haughey:

The State Department of Social Welfare takes pleasure in announcing the appointment of Willard R. Klunzinger, M.D., of Lansing, as State Supervising Ophthalmologist. Dr. Klunzinger will act as consultant, part time, to the Aid to the Blind and Division of Services for the Blind programs. Dr. Klunzinger succeeds Dr. John O. Wetzel who served in this capacity for a period of ten years.

We believe the members of your profession will be interested in this announcement.

Very truly yours,

F. F. FAURI
Director, State Department of Social Welfare

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